

Essays on Evolution

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Introduction.

The Dayton Trial — An Aftermath.

The decision came July 21, 1925, when John Thomas Scopes, twenty-four-year-old high school teacher of Dayton, Tenn., was found guilty of violating the Tennessee Anti-Evolution Law. When the jury had returned its verdict, Judge Raulston summoned Scopes before the bar and imposed a fine of \$100.

Attorney-General Stewart had thus stated the case of the State when the trial opened: "John T. Scopes, a teacher in the Rhea County High School, violated the Anti-Evolution Law by teaching a theory that man descends from a lower order of animal life, and therefore taught a theory which denies the story of divine creation of man as set forth in the Bible. This is in violation of the Anti-Evolution Law."

Bail for Scopes was fixed at \$500, pending appeal of the case to the Supreme Court of Tennessee at Knoxville.

Since then we have had the aftermath.

The climax probably came with the Associated Press announcement of the excommunication of E. A. Kundred by the Lutheran church at Kendallville, Ind. Kundred is a gladiolus grower, and the church authorities decided that in hybridizing his gladioli to produce new varieties he was interfering with the divine scheme of things. They voted that "if the Almighty had wanted gladioli to be hybridized, He would have made them that way," and excommunicated Mr. Kundred. Now, according to the statement of Pastor M. F. Kretzmann, of Kendallville, Mr. Kundred never was a member of the Lutheran Church, probably never attended church after his confirmation, has not lived in the neighborhood of the Kendallville church for the last eighteen years, and was certainly never dealt with in the manner described in the press dispatches. But this disavowal will never overtake the sensational report, and the excommunication of the Indiana hybridizer of gladioli will go down in history in connection with the Dayton trial as an example of the opposition of the Church to modern science.

Meanwhile the Ku Klux Klan has once more come to the rescue of Christianity. It had sponsored the Anti-Evolution Bill and will devote to the suppression of the Darwinian doctrine hereafter what strength it can spare from its fight upon K. C's, Kykes, and Koons.

In London, Prof. George M. Price, the geologist who believes in the Genesis account of Creation, was howled down by the audience when he appeared for a lecture entitled, "Is Evolution True?"

In Jewell County, Kans., the school board of a rural district ordered a set of books burned which contained a discussion of the theory of evolution.

From Oslo to Adelaide.

But these are high spots only. The discussion of the Dayton trial has reverberated around the earth. I have before me a copy of *Hjemmet*, published in Oslo, Norway, containing on its first page pictures of the Neandorthaler and of Pithecanthropus, illustrating an article on the "Adventure of Man's Origin." The author is one of the multitude upon whose mind the judgment of anatomists regarding these reconstructions has made as little impression as water running over a marble slab.

Presbyterian and Anglican papers in Australia have come to the rescue of Darrow, describing the whole action of the State of Tennessee as "handcuffs on science" and protesting that "we need no longer apologize for saying that man has developed from a lower animal life." An Anglican theologian addresses a Melbourne paper with a letter, pointing out that it has long been recognized by all educated Christians that "much of the Bible is the poetic and allegorical representation of religious ideas, and to regard these books as literal science and history is to misunderstand the intention of their writers, indeed, to misunderstand the whole nature of the essentially poetic Hebrew ways of thinking." The "farmers and townspeople of the American Middle West" are held up to the Australians as horrible examples of "folks who have allowed their minds to grow hard and rigid from disuse and who are apt to take a short way with notions which threaten their certitudes."

Thus Dayton is more than an incident, it is a shibboleth. Around it rages, and will continue to rage for a long time, the controversy between Creation and Evolution, and the world-views which these two words represent. The attempt which was made by the lawyers for the defense to inject the discussion of the truth or falsity of evolutionary doctrine into the trial was unsuccessful. But enough was said both by the defense and by the prosecution to reveal the underlying issues. And these issues are not so much two mutually exclusive views of the beginning of things as two diametri-

eally opposed attitudes regarding the truth of Revelation. In this there is no little merit. The American people may remember little even now regarding the wrangles of lawyers in the Dayton court July 10—21. But they do remember, and will remember, Darrow's protest against opening the court with prayer. They will overlook the constitutional justice of that protest; they will recognize in it an attitude. Darrow, the atheist, protesting against prayer, will remain to millions an Emblem.

The Blunder of the Defense.

And, indeed, if ever that hatred of revealed Truth and Divine Law which we have elsewhere termed the "Fatal Bias" of the evolutionists has led them into a series of egregious blunders, it was in the Tennessee trial. Mr. Bryan's comment upon the employment of an atheist as chief counsel — of Darrow, the defender of the young Chicago murderers, who had stressed their faith in evolution — was unanswerable, withering. Millions have read his statement and have nodded their assent: "Mr. Darrow's connection with this case and his conduct during this case ought to inform the Christian world of the real animus that is back of those who are attempting to enforce upon the schools the views of a small minority, regardless of the fact that the philosophy of life based upon evolution robs the individual of a sense of responsibility to God and paralyzes the doctrine of brotherly love."

Well might the *New York World* say: "The truth is that when Mr. Darrow, in his anxiety to humiliate and ridicule Bryan, resorted to sneering and scoffing at the Bible, he convinced millions who act on superficial impressions that Bryan is right in his assertion that the contest at Dayton was for and against the Christian religion."

The clause "who act on superficial impressions," sounds unconvincing, particularly also in view of the fact that Darrow's right-hand bower was the Unitarian clergyman Potter of New York, who soon after the trial boasted "that he was the religious expert who wrote out the questions which Darrow presented to Bryan," and who in the same interview, in reply to a direct question, said it would be "perfectly possible for a Christian church to accept an agnostic as a pastor." Even the *thinking* millions will find a strange agreement between Potter's assertion that we "don't think that God made man; we think that man made God," and the declaration of a Jewish infidel, Rabbi Urich of Milwaukee, who in his comment on the Tennessee trial said: "God is an instance of evolution, for He is merely the creation of man's mind. The science of religion proves that God did not create in His own image, but that man created God

in his image. What we must do is to pull God down from the heavens and have Him inhabit the earth; not merely reside in the ethereal vacuum."

So far, good and well. The world has heard Darrow state with all possible clearness that the intention of the defense lawyers was to "turn back the tide that has sought to force itself on the modern world—the testing every fact of science by religious dogma." Those who remember the fanatical crusade which Huxley waged against the Bible (*Science and Hebrew Tradition*, p. X: "The infallibility of *Scriptura delenda est*. Essays in present and following volume are, for the most part, intended to contribute to this process of deletion") will not fail to see the point of a remark made by Forrest Bailey of the American Civil Liberties Union (which backed the defense): "This case offers a unique opportunity to take the wind out of the Fundamentalists' sails and to do even more effectively what Huxley did in England and America between 1860 and 1880."

Where the Church Failed.

All this is so clear that he who runs may read. The line-up was between the believers in supernatural Revelation and those who deny it. Now, what the people might have expected in the aftermath of the Dayton trial is a clear and unmistakable line between the Church, which must stake everything upon the inerrancy of the Bible, on the one hand, and the forces of infidelity, on the other. What has actually happened must be a great disillusionment to those who harbored such hopes. Not only scientists who announce their belief in religion, but even Protestant clergymen have allied themselves with Darrow.

Typical of the Modernist attitude is a series of articles contributed by Rev. Geo. E. Hunt (Presbyterian), of Madison, Wis., to the *Milwaukee Journal*. The Bible "makes no claim to divinity," "does not claim to have been dictated by God." Hunt declaims against "the ancient notion of a divinely dictated book, sent from heaven to guide men into all knowledge," and against the "literalists": "Those bats and owls who live among the dry cobwebs and ancient dust of theological lofts, who have voiced their sad hoots at the teaching of evolution." He is unable to accept the time-honored belief "that God took a lump of clay, molded it with His hands into the form of His own body, and then breathed into this clay image the living spirit, and that this was done in a single day of twenty-four hours."

The Lutheran clergy has entered the lists in defense of the doctrine of Creation, the only rift in the lute being a newspaper

article by Rev. Newton H. Boyer of the United Lutheran Church, who in the *Daily Oklahoman* answers with a decisive *No* the question: "Is the Creation of Genesis Literally True?" "If I were a literalist," he says, "I would have to believe that serpents would always have to crawl on their bellies because one once tempted Eve. If I were a literalist, I would be under the necessity of believing that God cursed the earth; weeds, noxious growth, are the results of man's sin; in other words, that unconscious, inanimate nature suffers for what my ancestors did; I would be obliged to believe that God often acted at the prompting of a whim, a caprice, and that His eternal judgments are based on an arbitrary desire to punish. All of which is either pagan in conception or utterly irrational."

To all of which Clarence S. Darrow would unhesitatingly subscribe.

The effect of such sponsorship of the evolutionary theory by Christian clergymen must be greatly confusing to the man in the pew. The saying of our Lord regarding those who deserve that a millstone be tied around their neck surely applies to these infidels in the pulpit.

Introducing a Withered Virgin.

Nevertheless, the expressions of the lawyers and experts in attendance at the Dayton trial contain scant comfort for the camp-followers of evolution. Science falsely so called was represented by some of its spokesmen, yet never has looked to us so much like a godless Samson who "thought he could go out and shake himself as of old, but he could not." Really, there is no more telling argument against evolution than the words of its spokesmen who addressed the crowds at Dayton or made the trial an occasion for interviews to the daily press.

Dr. M. M. Metcalf, a Johns Hopkins professor of Zoology, admits concerning the lowly beginnings of organized matter that "their nature is not by any means fully understood," yet bravely continues: "Now from these first living things which could live on inorganic substances there developed a whole series of forms," etc. A little farther down follows this classical expression worthy of being pasted on the wind-shield of all Americans who have their first infection of evolutionism:—

"The difference in the development of animals and plants was largely due to their food habits. The plants stood still and let food come to them while animals hustled for it. The consequence was that animals developed organs for moving themselves and for grasping food, and these developments led in turn to many other changes and advances, so that the divergence between animal and plant life

became increasingly broad"—! A theory is in its second childhood that can offer such mythological meditations to the public and call them "science."

An extremely unsuccessful wriggle we would call the statement of Prof. M. F. Guyer, Wisconsin University professor of Zoology. He is now satisfied to call evolution "change" and let it go at that. He said in an interview: "Evolution does not always mean progress from simple to more complex forms, though that is the generally understood definition. To the scientist it means *change*. Most of these changes are from simpler to more complex forms; but there are other instances of what we call regressive evolution, where the process is reversed."

It is when confronted with such expressions as quoted that we hesitate to call evolution a scientific hypothesis. A hypothesis, if worthy of the designation "scientific," must be a proposition not contradicted by the facts which it is intended to explain. Yet every effort to raise the evolutionary theory from the domain of speculation into the realms of scientific hypotheses has met with disaster. It is admitted by scientists that the "method" of evolution is unknown. This destroys evolution as a scientific hypothesis, since it is, in its very essence, a quest for a "method" or origins and nothing else.

In the speeches made at Dayton, and in the newspaper discussion which followed, there was again in evidence an almost pathetic reliance of the evolutionist upon the data supplied by geology, — data supplied by geology only after they had been transferred to its account through a very deft sleight-of-hand by the evolutionists themselves. The fallacy crops out in such statements as these (Chas. C. Ziegler, in the *St. Louis Post-Dispatch* of September 6): "To my mind the indirect or corroborative evidences of evolution are just as strong as the direct. The succession of living forms, as shown by their fossils in the geological strata, was from the simple to the complex, from the lower to the higher." Or, quoting from Rev. Hunt: "There, in the form of fossils, lying in these various strata of rock, from the earliest up to the latest layers, is plainly visible to the human eye the whole course of the growth and unfolding of plant, insect, reptile, and animal life of the earth. In the long series of rock deposits one cannot help but note the gradually ascending scale of life, running through uncounted millions of years. In these later deposits are forms of manlike creatures that suggest very significantly that man himself is a product of the whole process."

Now, as was pointed out first in our *Evolution: An Investigation and a Criticism*, this entire argument from geology is based upon a tremendous "circle in reasoning." Prof. Geo. M. Price has recently

expressed it thus: "We have awakened to the idea that this entire classification is merely the geological phase of the theory of evolution, and that this geological series is in reality the last and most important stronghold of the whole theory of evolution. Not only so, but a multitude of discoveries are now known which prove conclusively that the rocks and fossils placed at the bottom of this series are not necessarily older than the others." The argument is more fully dealt with on pages 59—61 of the text just quoted. The theory of overthrusts, which is made to account for strata that occur in the reverse of the order demanded by evolution, receives proper attention in Professor Price's *New Geology*, p. 277 ff.

Naturally, one of the first scientists to be called to Dayton by the defense lawyers was Prof. Edwin G. Conklin, the Princeton biologist. While not permitted to testify, eager interviewers obtained his opinion. He is quoted as saying: "It is plain that the causes are complex, and they have not yet been fully discovered. It is even probable that some of the proposed causes are erroneous and will have to be abandoned. But the same may be said with regard to the causes of gravitation, light, electricity, chemical affinity, life, or any other natural phenomenon." And again: "Lowly origin is not incompatible with ultimate greatness, as none knows better than the countrymen of Washington, Franklin, Lincoln, and Grant. All the greatest leaders of men were once babies and germ cells, and yet this humble origin does not preclude a glorious destiny. It is odd to see our Great Commoner objecting so strenuously to this democratic doctrine."

A theory must be in dreadful straits when its spokesmen are compelled to descend to such levels. Professor Conklin cannot be unaware of the fact that the common people will understand him to say that evolution is as clearly understood in its laws as we understand the laws of physics and chemistry, and that there is something analogous between evolution and the development of "grown men from babies and germ cells." It is when we note the intricate sword-dances which the masters of evolution must perform in order to razzle-dazzle the public into trustful security, that we experience a feeling like nausea at the entire subject. By comparison it is refreshing to read the straightforward statement of Professor Milliken, of Chicago, who brought consternation to the Darrow crowd when he uttered his "Not proven!" Robert A. Milliken is winner of a Noble prize in physics. Addressing the American Chemical Society August 6 at Los Angeles, he said: "The pathetic thing is that we have scientists who are trying to prove evolution, which no scientist ever can prove."

Prof. William Emerson Ritter, of the University of California, is one of the outstanding scientists in the world. We take the word of scientists for this. Very recently he said: "If one scans a bit thoughtfully the landscape of human life for the last few decades, he can hardly fail to see signs that the whole battleground of evolution will have to be fought over again, this time not so much between scientists and theologians as among scientists themselves."

The Antichristian Bias.

Nor has the antichristian bias, to which the evolutionary hypothesis owes its vogue, failed to assert itself at Dayton and in the Dayton aftermath. Dr. Osborn has gone on record with the statement that since Darwin's time scientists have "been eager to discover some natural cause of evolution and to abandon the idea of supernatural intervention in the order of nature." Plain enough, is it not?

According to an article in *Asia* (Vol. 24, No. 6) Professor Osborn means by *soul* "the spiritual, intellectual, and moral reaction to environment and to daily experience. When we speak of 'the soul of a people,' 'the soul of Japan,' 'the soul of China,' 'the soul of France,' we refer to something created, not in an instant, but in eons of time. This racial soul is the product of thousands of years of past experience," etc. So the soul is an abstraction only, an attitude, not an essence, destined for immortality. A bleak naturalism, not surprising in a scholar of Thomas Huxley.

Professor Conklin's religious views find expression in the interview already quoted, thus: "The religion of evolution is nothing new, but is the old religion of the world's greatest leaders and teachers; the religion of Confucius and Plato and Moses, and especially of Christ, which strives to develop a better and nobler human race and establish the kingdom of God on the earth." This is not so much the antichristian as, even upon superficial analysis, the irreligious attitude, which simply rules out the supernatural. Noble words, they cannot cover up the hideousness of a theory which places an animal at the beginning of human history. From this theory the ordinary mind will draw the conclusion voiced in a newspaper letter by an Illinoisan: "One thing is certain, if our ancestors were beasts, I care not how far back you go, we, too, are beasts. And if beasts, what right have we to hope for a future estate beyond the grave any more than any other beast?" This is the plain English of the philosophical statements of Osborn regarding the soul and of that naturalism which Conklin is able to utter with such spiritual accents.

Roman Rationalism.

The comparative liberality which the Roman Catholic Church accords to its priests and people in this same matter has again been evident in the discussion which has followed the Scopes trial. After quoting from Augustine and Thomas Aquinas, Professor Windle of the University of Toronto said: "The matter may be summed up by saying that if and when the state of science is in such a position as to establish the fact of evolution either on limited or unlimited lines, there most surely will be nothing in any attitude so far taken up by the Church to render acceptance of the view impossible or even difficult. Nay, more; it will be found that it has been accepted in advance as a perfectly possible — many would say highly probable — method of creation."

McCann's *God — or Gorilla* takes the middle-of-the-road attitude regarding organic evolution in general while denying most strenuously the pertinence of the so-called proof from fossil human remains. Mr. McCann, who is a Roman Catholic, says: "I have never failed to admit that God might have worked, had He seen fit, by some evolutionary process in His creation. It is altogether possible that as far as our bodies are concerned, we have derived them from some preexisting form, which took its own body, in turn, from a still earlier form. All this is nothing to me, because I am still confronted by the phenomenon of the soul, which by its very nature, a simple spiritual substance, could not have been evolved from matter under any theory of evolution ever proposed."

On the other hand, Prof. Geo. B. O'Toole of St. Vincent Archabbey, Greensburg, Pa., in his more recent book *The Case against Evolution*, not only denies the validity of the evidence adduced for human evolution, but charges the evolutionists with destruction of religion and morals: "Had evolutionary enthusiasts adhered more strictly to the facts, had they proceeded in the spirit of scientific caution; had they shown, in fact, even so much as a common regard for the simple truth, the 'progress of science' would not have been achieved at the expense of morals and religion. As it is, this so-called progress has left behind a wake of destruction in the shape of undermined convictions, blasted lives, crimes, misery, despair, and suicide. It has, in short, contributed largely to the present sinister and undeserved triumph of materialism, agnosticism, and pessimism, which John Talbot Smith has fittingly characterized as the three D's of dirt, doubt, and despair. A little less sensationalism, a little more conscientiousness, a little more of that admirable quality, scientific caution, and the concord of faith and reason would have

become a truism instead of a problem. But such regrets are vain. The evil effects are here to stay, and nothing can undo the past."

Such conflicting views on a matter vitally touching religion are permitted within the Catholic Church. All that it prescribes to its teachers is the doctrine that the human soul is a divine creation. So much granted, its teachers may go the whole length with Darwin and Huxley.

A Morihund Hypothesis.

Meanwhile scientific research is going on serenely unconcerned, so far as it is scientific, about the Scopes trial and its implications. And wherever it penetrates below surface appearances, it finds difficulties mountain-high rising against the acceptance of the evolutionistic scheme of causes. It has been argued that certain mutations, or variations, such as Luther Burbank has produced, and the development of high-producing cattle, such as the cow that yields thirty thousand pounds of milk a year, show variation in the direction of progress; but the answer is obvious: All the artificial breeds, if left to themselves, would soon revert to the ancestral type. David Starr Jordan has quite recently said: "A species is a race that has run the gauntlet of the ages in the open and survived. None of the new species created in the laboratory would last five years in the open. A greenhouse variation is easily secured. It is like calling a military school cadet a soldier. A soldier is one who has stood." This, of course we have all known a long time. But the earth begins to rock under our feet when we read the following sweeping admission of Prof. M. F. Guyer: "Most biologists no longer believe that changes in form are brought about as a result of external conditions, that is, by the action of outside influences upon the parent, which after a long period begin to be transmitted to offspring. Biologists believe changes are first impressed upon the germ plasm and that these changes are transmitted to offspring, which then begin to differ from the parent. How these changes are induced in the germ plasm is a problem we are trying to solve." This throws back the entire discussion to where it was before Darwin wrote his famous treatise.

Chas. D. Stewart writes entertainingly in the July *Atlantic Monthly* on the mystery of the honey-bee and comes down to cases in his description of the wonderfully complicated knee-joints of the bee. Referring to the idea of natural selection, which gives an animal a "spontaneous" tendency to vary in all sorts of aimless and unidirected ways and then builds up from some primitive or one-celled form by a long series of coincidences, Mr. Stewart says: "The human mind, starting out to give this theory definite application, is immediately brought to a halt. A man will ask questions, and so he

wants to know whether the bee's antenna existed first and needed a cleaner for long periods of time, or whether the cleaner happened first and was in need of something to clean. As to the gradual evolution of tools, here is a bothersome thought: Some tools are of such a nature that they are not of use till they are complete. A wheelbarrow without a wheel, a pipe-wrench without a jaw, would be an entirely unevolved piece of evolution. The antenna-cleaner seems to belong to this class of tools. One cannot imagine its progressive stages and see how any one of the imaginary states of incompleteness would give its possessor any advantage over other insects in the struggle for existence."

Evolution and Scripture.

As for the major and all-essential question: Can evolution and the Scripture be harmonized? David S. Clark says in a recent number of the *Princeton Theological Review*: "As far as materialistic or naturalistic evolution is concerned, the answer must be a decided *no*. In behalf of theistic evolution the attempt has frequently been made, but it cannot be said with entire success. It must not be assumed, however, that, even if such harmony could be established, this would prove evolution to be true. The proof of evolution must rest on positive grounds. It is not a mere choice between a naturalistic uniformitarianism and a supernaturalistic uniformitarianism, but whether even the latter is true. As long as evolution defines itself as 'development,' 'history,' or 'orderly change,' — as long as evolution confines itself to the limits of species, one need hardly enter the lists. But when evolution transgresses these limits and affirms the transmutation of species, deriving all sentient being, the race of man, body and soul included, from a primordial germ, then discussion arises and opposition ensues. Transmutation is of the essence of evolution — is really what evolution means. There may be room for difference of opinion as to the limits of species, some more, some less, inclusive, as the case may be; but that there are such limits the sterility of hybrids and the laws of Mendelism conclusively show. The laws of nature show a very decided respect for the limits of species, and to this the first chapter of Genesis bears witness: 'And God said: Let the earth bring forth grass, the herb yielding seed and the fruit-tree yielding fruit after its kind, whose seed is in itself. . . . And the earth brought forth grass and herb yielding seed after its kind, and the tree yielding fruit whose seed was in itself after its kind.' Gen. 1, 11. 12. 'And God created every living creature that moveth . . . after its kind, and every winged fowl after its kind.' V. 21. 'And God said: Let the earth bring forth

the living creature after its kind, cattle and creeping thing, and beast of the earth after its kind. . . . And God made the beast of the earth after its kind, and cattle after their kind, and every thing that creepeth upon the earth after its kind.' Vv. 24. 25. How careful the Scripturo is to stress the words '*after its kind*'! These are statements for the Christian and the scientist to ponder. And there are many who hold that the physical law of the inviolability of species and these express statements of Scripture are cogent and conclusive evidence that transmutational evolution is in harmony neither with the Scriptures nor with the laws of nature."

Not only this, but it stands as a denial of every essential Christian belief. As a layman wrote to the *Adelaide Register* when the Dayton excitement was at its height: "Whenever the standard of Christianity is lowered, there is a marked increase of worldliness in the Church. There is no doubt that much of this is due to the conduct of the clergy, many of whom have imbibed the teachings of the higher critics and the evolutionists and have, in turn, passed on these pernicious doctrines to their congregations in place of the pure Gospel of Jesus Christ. The severest indictment that must be brought against the God-dishonoring theory of evolution is that it denies that there was a fall; therefore there is no need of the plan of redemption or of the Savior, the central figure of that plan to redeem and restore to original purity and sinlessness. While higher criticism denies the inspiration and infallibility of the Scriptures, the virgin birth and deity of Jesus, and practically every other fundamental doctrine of Christianity, their preaching has consequently lost converting power. The Spirit of God cannot work where the fundamentals of Christianity are denied."

And Finally: What of the Tennessee Law?

And now, what will become of the Tennessee law?

The lawyers of Mr. Scopes have appealed their case, and very probably the Supreme Court of the United States will have to say the final word.

Is the law in harmony with the American doctrine that the individual's right to his particular belief shall remain inviolate?

A Twin City paper comments: "It is this issue which makes the case one of transcendent importance, since, if such legislation should be held constitutional, there is no reason why legislatures and congresses should not, in effect, set up that very 'establishment of religion,' forbidden in the first Amendment to the Constitution of the United States. If the teaching of the evolutionary hypothesis can be forbidden, there is no limit to legislation along collateral lines. The religious liberty which the American people have enjoyed

for more than a hundred years would be destroyed, and we should have in free America such persecutions as have marked ascendancy of various religious sects since medieval times. Against so dire a peril it seems to us that every American, evolutionist or fundamentalist, must earnestly contend."

Judge Raulston has given the Tennessee point of view as follows: "I cannot conceive how the teachers' rights under this provision of the constitution would be violated by the act in issue. There is no law in the State of Tennessee that undertakes to compel this defendant, or any other citizen, to accept employment in the public schools. The relation between the teacher and his employer are purely contractual, and if his conscience constrains him to teach the evolution theory, he can find opportunity elsewhere."

Prof. J. G. Halland, formerly State Superintendent of the North Dakota public schools, has voiced his agreement with this line of thought as follows: "The evolutionist has a hypothesis, or creed, that explains to his satisfaction the origin and nature of things, of man and of mind and matter. This is his religion. With him it takes the place of Genesis and all other theories of creation, or cosmogonies. To this religion he is entitled. It is his constitutional privilege. If, however, in the enjoyment of this privilege, he becomes enthusiastic and feels a great urge or desire to spread his religious belief, it is also his privilege to build a lecture-hall or climb a soap-box, where he doesn't interfere with traffic, and to invite his neighbors to listen to his explanation of his creeds, theories, etc.; but he must not expect the taxpayers of any American community to build school-rooms, compel the children to attend, and then turn him loose on them to teach his particular brand of religion, even if he attempts to disguise the nature of his efforts by calling it science."

Much speculation is even now rife regarding the application of the Oregon decision to the present case. Certain broad principles have been laid down by the court which will be invoked by the attorneys of both sides in arguing the right to teach the doctrine of evolution.

The Supreme Court says significantly that "no question is raised concerning the power of the state reasonably to regulate all schools, to inspect, supervise, and examine them, their teachers and pupils."

From this the defenders of the Tennessee law are going to argue that the court itself agrees that such a power is vested in the States. The opponents of the statute, on the other hand, will derive inspiration from other parts of the same decision, which says the child is not the creature of the State, but can be educated at the direction of the parent in whatever schools are chosen.

In the Tennessee case the legislature simply prescribes what shall or shall not be taught in the public schools, whereas in Oregon the legislature undertook to compel all children to attend one kind of school, namely, the public schools. William Jennings Bryan insisted that parents who want their children taught evolution may send them to private schools which have this branch of study in their curriculum. The Oregon case, however, lays down some principles as to the right of the parent with respect to education generally, and the opponents of the Tennessee law are planning to argue that, since the people are taxed to support the public schools, such doctrines shall be taught as are not inimical merely to the public welfare. They will say that any regulation which touches the broad ground of religion is an interference by the State in the right of religious worship, whether the interference is in the form of a regulation requiring the teaching of the Bible or the prohibition of any particular religious doctrine.

The Tennessee case will, therefore, hinge largely on technical rights such as were raised in the Oregon case and not on the merits of the doctrine of evolution, whether it is harmful to the education of the young if taught or suppressed.

1. The Conflict.

"When this talk-fest and publicity stunt," the Dayton, Tenn., evolution trial, "is over, the Bible will still live as the inspired Word of God, the scientific search for undiscovered truth will continue. And no one need be alarmed that any truth discovered by man, the creature, can overturn or undo that which is made manifest by his Creator."

Christians everywhere have realized the truth of this statement by John E. Edgerton, president of the National Association of Manufacturers.

The lawyers for the defense of man's descent from the monkey* started out to prove two things: 1) That all who are fighting evolution are fighting science, and 2) that evolution is not in conflict with religion. Those who followed the case had the definite impression that the defense lawyers were filled with venom against Biblical Christianity and left no stone unturned to introduce evidence which would unsettle popular faith in the Bible. But if we ever thought we had definite impressions of what evolution is or how it works, we surely have lost them if we followed the reports of the trial. Never has the hollowness of evolutionistic claims become so apparent as in the expressions of scientists who sought a hearing at the Scopes trial in Dayton, Tenn.

A House Built on Quicksand.

Every American of newspaper reading age should at this time know that the structure of evolution is built on quicksand. Not on fact, not on observation supported by experiment, but on mere hypothesis, all the arguments which evolution brings against the Bible have been erected. Maynard M. Metcalf of Johns Hopkins says through an interviewer:—

"The fact of evolution is perfectly clear. The sequence of organism on the earth is a fact, and that fact is evolution. It is simply one of those things which are too obvious to be denied. On the other hand, it is by no means clear how it occurred, and there

* Sometimes it is flatly and even indignantly denied that Darwin held to the monkey origin of man. But Darwin's own words ought to be convincing. I quote directly from his *Descent of Man* (second edition, chap. VI, pp. 220. 221): "The Simiadae then branched off into two great stems, the New World and Old World monkeys; and from the latter, at a remote period of time, Man, the wonder and glory of the universe, proceeded." If that is not first-hand testimony, it would be hard to find any.

are various conflicting theories as to how and why it occurred, most of them seeming to be supported by certain evidences.

"It is extremely doubtful if there will ever be as much certainty about any one theory of evolution as there is about the fact of evolution. This is true about every great fact or basic set of facts in the scientific world."

This is a plain attempt to throw sand into people's eyes. The word "fact" as used among men means "proved instance," or it means nothing. Yet Dr. Mctcalf knows well enough that there is not a single proved instance of evolution in all the records of science. To rail at Mr. Bryan and all those who hold that evolution is unproved as if they were opponents of science is the last resort of those who now, after nearly a century of evolutionistic biology, must admit themselves beaten.

A theory which is supported by fact does not require evasion, trickery, and misrepresentation of the opponent. In a recent book a photograph was shown which brought out a remarkable resemblance between the gorilla's foot and the human. The resemblance to the human foot is so true as to be startling. If it were true, then a brute was found that in physical structure nearly resembled man. Perhaps it was the Missing Link! Naturally the book and the illustration made a stir in the scientific world.

Enters here Sir E. Ray Lankester, who examines the photos, then the cast from which they were made, and comes to the deliberate conclusion that the whole thing is a fake. Of the photograph he says: "It is entirely misleading, since it suggests a resemblance between the great toe of the gorilla and that of man, which does not exist." Then he goes on: "I wish to record my opinion that the actual gorilla's foot from which the cast was taken was distorted by post-mortem changes and by pressure tending to bring the big toe alongside of, and parallel with, the other toes as in man, instead of allowing it to diverge widely from them as it does when not artificially constrained."

Indeed, the English scientist does not hesitate to charge the author with having made a photograph of a cast "deceptively illuminated and made to present a false resemblance to the foot of man." And to prove it, he illustrated his reply with other photographs of the same cast made by reputable photographers. One cannot omit mentioning in this connection the fact that Ernst Haeckel, the greatest disciple of Darwin, has conclusively been proved a forger of photographs representing human embryos as closely resembling those of various animals. These forgeries are known to every naturalist and have been demonstrated by the foremost scientists

of Germany. A theory which is true does not need such falsehoods to support it.

Nor does it require a scientific mind to recognize the futility of evolution as an explanation of the universe. Only last year a lecturer in Harvard University, speaking in the Lowell Institute, explained the rattlers of the rattlesnake as due to fear of the buffalo. The buffaloes so often stepped on the snakes which would stray into their feeding-grounds that the party of the second part decided to defend itself by acquiring a set of rattlers. So they grew some rattlers on the tips of their tails, and ever after the buffaloes would jump six feet sideways when they heard the r-r-r. This saved the rattlesnake. Lest my readers think that I am slandering modern science, let me quote from the lecture just referred to: "These ponderous animals, traveling over the plains, must have been distinctly dangerous to snakes living in the open, and while a bite, even after the snake had been mortally wounded by the feeding buffalo's hoofs, would be distinctly unpleasant to the buffalo, still death would probably but rarely ensue. Nevertheless, it would surely cause great pain, and the buffalo would gladly keep out of the snake's way if warned, and this warning the rattle gave." It seems to me that any normal American big enough to look over a four-foot wall can see that this is perfectly ridiculous. In order not to be obliged to bite the buffalo with its poison fangs, a snake develops a set of rattlers at the other end!

I wish some of the scientific talent which gathered at Dayton would take the time to read an article in the July *Atlantic Monthly*, entitled "The Bee's Knees," by Charles D. Stewart, who seems to follow in the steps of the great scientist Henri Fabre, who denied Darwin's theory. Referring to several facts about bees, especially neuters, he says: "Right here is where Darwin's theory of evolution went on the rocks. To every theory of evolution, heredity, the ability to transmit evolved traits to offspring, is absolutely necessary. Darwin acknowledged the difficulty found in bee life."

The difficulty in the case of the bees consists in this, that the workers are endowed with instincts (honey-gathering, etc.), which they cannot have inherited because these instincts are possessed by neither the mother (queen-bee) nor the father (the drone). Since evolution absolutely depends upon heredity, it is disproved by the case of the bee. Indeed, although there are two or three millions of animal species on earth, it has, according to Dr. N. S. Shaler, Professor of Geology in Harvard, not yet been proved that a single species has been established solely or even mainly by the operation of natural selection. Even Darwin himself said: "We cannot prove that a single species has changed." (*Life and Letters*, Vol. III, p. 25.)

One of the most recent authoritative publications by a German anthropologist urges that "the apes are to be regarded as degenerate branches of the prehuman stock." This means in a word that "man is not descended from the ape, but the ape from the man."

As if to mock the efforts of the Dayton aggregation of scientists, science discovered just at that time on a canyon wall of Arizona the picture of a dinosaur, drawn by a prehistoric hand. If man lived in the age of dinosaurs, he lived ten million years (according to the theory) before there ever were apes!

Evolution Atheistic.

Evolution means that everything has come into being by forces that dwell in matter. Its first assumption is that both time and matter are endless, eternal, uncreated. If you bring God into the equation, you can cancel Darwin. One or the other gives us a system. Each makes the other superfluous. A god that does not create, but is himself bound by the laws of nature, is not God. And still evolutionists try to overcome the scruples of Christians and to stem the tide of resentment which is sweeping over the nation by telling us that there is no conflict between evolution and religion.

Another dishonest trick is involved in this very statement. Reading it, every one supposes that the Christian religion is meant. What evolutionists really have in mind is the belief in the supernatural, in a higher being or power. This may be conceded if you do not take power in the sense of person. The doctrine that God is a Being with the personal characteristics of Wisdom, Love, Power finds no place in the genuine evolutionistic scheme.

In the *Outlook* for July 12, 1916, the editor, Dr. Lyman Abbott, quoted with approval the following from a recent book by John Burroughs: "The creative energy shows itself to be very human, very fallible, often vacillating and short-sighted. God has gone on with His work very much as man goes on with his—blundering, experimenting, but doing the best He could." What blasphemy! A "vacillating," "very fallible," indeed, "very human" Creator, a "blundering, experimenting" god, who "does the best he can"! No amount of fine phrases can glose over the atheism of such doctrine as this.

Evolution destroys the doctrine of the inspiration of the Bible by denying its inerrancy and its infallible and final authority. Over and over again in the early verses of Genesis we are told that God created the various species to reproduce "after their kind." But evolution says that this is not true and asserts that the various

species have continuously evolved from one to another all the way to man.

Evolution destroys the doctrine of the fall of man and its result, total depravity. The Word of God says that man has gone down from a condition of purity and innocence into a condition of such sinful enmity against God that he is not only not subject to the Law of God, but is utterly incapable of bringing himself into subjection to it. And the experience of every Christian gives sorrowful, but certain evidence of that fact.

Now hear what the evolutionists say:—

"Theology has much to say about original sin. This original sin is neither more nor less than the brute inheritance which every man carries with him." (John Fiske, *The Destiny of Man*, p. 103.)

"Science has shown us that what is popularly called 'original sin' . . . consists of man's inheritance from his brute ancestry." (Dr. H. D. A. Major at Oxford Conference of Modern Churchmen.)

According to the evolutionary philosophy, sin cannot be "exceeding sinful," for it is either inherent in the process of evolution or, at worst, but an unfortunate slip in the working out of that process, if, indeed, it is not even a mark of budding virtue. And if this is so, man is in no way responsible for his sin. Punishment for sin is therefore absolutely out of the question. Sir J. William Dawson, speaking of the evolutionary doctrines as speculations, says: "They are accepted as affording a welcome deliverance from all scruples of conscience and fears of a hereafter."

Man's natural heart is strongly predisposed to the acceptance of any doctrine, contrary to that of the Bible, whereby he may account for the conspicuous fact of his moral condition, his hatred of his fellows, his readiness to do them injury, even to the shedding of blood, in order to gain some advantage for himself, his idolatries, his blasphemies, his licentiousness, his wars and strifes, his insanities and suicides, his thefts, his lies, his frauds, his debaucheries, and so on to the end of the dark chapter.

From this it is easy to perceive how it is that evolution as a religious doctrine, though without one fact to support it, finds such numerous adherents and such ardent defenders. What commends it to the unrepentant and unregenerate heart is that it offers an explanation of man's origin and of his moral condition which not only accords with his good opinion of himself, but which quiets his conscience as to the whole question of sin and even makes his fears of the Judgment to come a subject of contempt and ridicule. For evolution presents a man to his own admiring gaze, not as a perishing creature, lost and undone, but as a conquering hero, not as a fallen being, but just the reverse, a being in process of development from

a lowly origin and ever advancing to as yet unimaginable heights of perfection and glory.

The late Mr. W. J. Bryan's words at Dayton, Tenn., will appeal to every Christian:—

"The evolutionary hypothesis robs man's conscience of its compelling force. What feeling of duty can man have or what sense of responsibility to God if it must be strained through the blood of all the animal life below man? Religion, on the contrary, inspires to action. Christianity is not a lazy man's job. It represents the highest ideal known.

"We fear no scientific truth. What we object to is having these scientists and professors ask us to put somebody's guess ahead of the Word of God. And we object to their telling us that not only their ancestors, but ours, were monkeys and insisting that we adopt a philosophy that looks down, not up.

"Some of these scientists of America are dishonest scoundrels, afraid to tell their beliefs, burrowing in the ground and stealing away the faith of your children. But we've got them now where they've got to come up and fight."

The reaction of Christian scholars against the bold assertions of evolutionists is being reckoned with. At one great Eastern university, so we are informed on best authority, the professors of biology are cautioning their students against making too free use of the very term "evolution" when called into teaching positions. The term now being passed out as substitute is "adaptation." Plants and animals in the course of time have "adapted themselves" to soil, climate, and environment generally. In the very latest high school texts on biology the term "evolution" is studiously avoided, being introduced only in the closing chapters of the text-books. It is all "adaptation"—in order to avoid the opposition which is apt to be raised in the classroom against "evolve," "evolution." Arguments between pupils and teachers are highly distasteful, and school boards do not like to receive protests from parents. While the teachings of evolution are thus being instilled in a more insidious form, we have in this concession to public sentiment a clear indication that evolutionists have been forced to reckon with a Christian scholarship which not only from the religious, but also from the scientific standpoint has been waging an aggressive fight against science falsely so called.

After all, common sense does not so readily fall in with the view that man is essentially an animal. Railroads cannot be run on nebular hypotheses, but must be governed by common sense, otherwise neither freight nor passengers would be safe. I should hesitate to entrust myself to the trains of any system if I knew that the

construction engineers had acted on wild guesses, like the high school teachers of zoology when they teach man's descent from the ape. Recently this matter was tested out, with fine credit to the Santa Fe. The story is worth repeating.

It begins somewhat weirdly with the enrolment, at a Kansas college, of a boy who, as was later discovered, had entered merely in order to "smouch" the football signals and with this precious information return to his own college, a rival institution. At any rate, this was the construction placed on the presence of the man from the other college, and the punishment measured out to him by the students was according to the most refined forms of scholastic torture. When the worst was over, they kept him in a cage a few days and fed him through the bars. Then they took him on a truck to the Santa Fe depot, crated as he was, and demanded that the agent accept him as freight, to be taken to the other college town. The agent refused pointblank. He said, "That is *no animal*," and so they had to knock out a few bars, and the young man traveled home as a man and not as an animal.

Godless science makes of man an animal. Revelation says that he was made as the son of God. Luke 3, 38. And to that agrees sound common sense, business sense, railroad sense, government sense; and we cannot conceive that the day will ever come when government will look upon people as a higher type of brute, or when railroads will ship men like cattle. He that regards man as an animal is an enemy of human society, though he speak with a soft voice, and is a fool, though he wear thick glasses.

Evolutionistic propaganda is now reaching out for childhood. Chiefly through the printed page, but also by means of a dechristianized pulpit, the evolutionary hypothesis is set forth to the "man in the street" and even to the child in school as the result of historical and scientific research, to contradict which would classify one as a barbarian. *Ab the Cave Man* was, I believe, the first of the texts for collateral reading by which the grade scholars were introduced to their ancestor as pictured by the evolutionist. That was some twenty years ago. We now have Hendrik Van Loon's two books, *Ancient Man* and *The Story of Mankind*, which drop the mask of the story-teller still maintained in *Ab the Cave Man* and purport to relate the *history* of mankind from the earliest times to the present age. According to Van Loon it took our ancestors "almost a million years" to learn how to walk on hind legs. The author takes pains at every turn to disparage Christianity. Yet there are schools which require their scholars to read this alleged history. Fancy a child having learned the Bible story of the creation of man in the image of God and then being invited to accept Mr. Van Loon's picture of

primitive man: "Quite small, his entire body covered with hair, hands like those of a monkey, forehead low, eating his food raw, jabbering like an animal in the zoo." The wickedness of the imposture can be fully realized only when it is considered on what shreds of evidence evolutionists construct this picture of the ape-man—a hatful of bones, some kept by their finders under lock and key, their inspection denied even to scientists (Du Bois and the Trinil bones).

Another set of books of the same general character is the "Industrial and Social History Series," four small volumes published by Rand McNally. The titles are: *The Tree Dwellers*, *The Early Cave Men*, *The Later Cave Men*, and *The Early Sea People*. While these books do not so bitterly attack Christianity as do the works of Van Loon, they are even more vicious, since the pretense of history is more consistently carried through. Moreover, they are intended for the little ones, to be read at mother's knee or in the earlier grades, while Van Loon wrote for the upper grammar school classes.

Just now H. G. Wells' *Outlines of History* is the rage. Wells is a British author who wrote some remarkable novels fifteen and twenty years ago. Since that time he has joined Bernard Shaw and George Moore as one of the three most bitter enemies of Christianity living in England to-day. He made his *Outlines of History* a vehicle for the antichristian world-view of evolutionary philosophy.

There is no possibility of compromise. Between these two—the teachings of the Bible and the speculations of the evolutionist—there is an impassable gulf fixed, which no compromise of "theistic evolution" is able to bridge.

2. Evolution and Revelation.

The evolutionists are coming back at us. A class in high school was reading Emerson's *Essays*, and the teacher of English took occasion to sound her pupils out on the question of evolution. A Lutheran girl defended the Scriptural doctrine of Creation. Soon after, the teacher gave her some home reading, which proved to be a presentation of the evolutionary theory as applied to literature.

The Lutheran girl, not to be outdone in conferring favors, offered her teacher the December (1923) number of the *Walther League Messenger*.

When the paper was returned to the high school student, she found a note pinned to the article from which I copy the following:—

"So far as the Bible is concerned, the theory of evolution and the Bible do not contradict each other. At one time, people who did not attempt to get to the bottom of things and who were thoughtless, or who were incapable of scientific or clear thinking on a subject, jumped to the conclusion that they were contradictory, but since that time many of the world's most devout and great men have accepted without question the theory of evolution, and many—perhaps most scientific researchers—have been thoroughly in acceptance of the religious spirit of the Bible. In fact, the further into the study of the laws of the universe one goes, the more profound is one's feeling of reverence for the Great Spirit responsible for the establishment of such a system. Man's mind inevitably searches to reduce things to order—to a system. If man is 'created in the image of God' (and it is the *spirit* that matters, the soul, the mind), shall we attribute less than a reasonable system of order to His universe?" All of which is not argument, but assertion. Only on one point does the writer try to adduce proof: "Instinct is another indication of evolution. Instinct is the stored-up wisdom of countless generations of fore-bears in learning to survive. Other species *have* persisted in this process."

As for developing instincts, more will be said in our chapter on "The Barrier of Instinct." But what about the relation of evolution to religion? Is it true that only ignorance and prejudice keep us from harmonizing the two?

Now, it can easily be shown that the Bible and evolution are in conflict at least on ten essential points:—

1. The Bible teaches that God is a factor in human life; evolution eliminates Him.

2. According to the Bible, man was created. Observe that of the animals it is said that the sea brought them forth, or the land brought them forth, each as a species or kind; while man was not created "after his kind," as a species of animal, nor was he brought forth out of the earth like the animals, but God said: "*Let Us make—!*" Evolution declares all this to be myth or poetry and says man has developed by a long process from lower forms of life.

3. The Bible teaching concerning the creation of the first woman is set aside as a fable by every evolutionist.

4. The Bible teaches that God spoke to man; evolution teaches that there is no direct communication or revelation from God.

5. The Bible teaches that God has performed miracles; evolution rejects all miracles.

6. The Bible teaches that Jesus was born of the Virgin Mary; evolution says that Jesus was born like all other men.

7. The Bible teaches that the soul is immortal; evolution teaches that men perish like the beasts.

8. Both Mr. W. J. Bryan, who was a Christian, and the Unitarian, Rev. Frank S. C. Wicks, of Indianapolis, who is an infidel, agree that so long as the Bible teaches the fall of man, evolution will be the deadly enemy of Christianity.

9. The Bible says that man was made in God's image, with a holy and righteous moral nature; evolution says that morals have developed from animal instinct.

10. The Bible teaches that man is responsible to his Creator; evolution teaches that there is no universal moral law binding on conscience and hence no moral responsibility.

By far the greater number of evolutionists are agnostics. An agnostic is a person who answers all questions regarding God and religion with "we don't know." Darwin was an agnostic. Many are atheists. Spencer, Huxley, and Haeckel were atheists. An atheist takes the position that the existence of God is not only not proved, but that it is disproved by science. Their attitude is that of the bug pictured by the cartoonist Paul Bransom in the *Minneapolis Tribune*. This bug is just issuing from the horn of a cornet and remarks to a fellow-bug: "I have been all through, and I couldn't find any music!"

How our high school teacher in the face of all this can say that only prejudice and ignorance keep us from harmonizing evolutionary science and the Bible, is hard to understand. The explanation probably is that she is ignorant of the principles of evolutionary science, or of Bible doctrine, or of both. Certainly, if God did not create Adam in His own image, then there could have been no fall of man. And if man has not fallen into sin from a state of holiness, then there is no restoration of the divine image, no redemption, no salvation. Prof. Wm. H. Wood of Dartmouth College has written a book printed by the Macmillan Company in 1922 on *The Religion of Science*. Professor Wood himself is not an orthodox believer, but his entire book is written in order to prove that the religion of evolution is something radically different from the religion of the Bible. And let us not fail to note that those who accept the evolutionistic religion are forced to accept also its morality, the teaching of evolution regarding right and wrong.

In 1907 the *Century Magazine* contained an article defending the proposition that the Ten Commandments have been evolved rather than given by revelation to Moses. The author tries to show that even the animals are governed by the principle of the Moral Law. Honest scientists, like Alfred Russell Wallace, Agassiz, and Dana, to mention only these, admit that there is absolutely nothing

corresponding to a moral sense among the animals. As Professor Wood says, there is nothing in the animal corresponding to the sentiment: "How can I do this great wickedness and sin against God?" But since the evolutionist denies that God reveals Himself and hence declares the giving of the Ten Commandments to be a fable, like the creation story, it is clear that he cannot accept the



Just Like the Atheistic Bug.

Paul Bransom, in the *Minneapolis Tribune*, makes the emerging bug say: "I've been all through, and I couldn't find any music," a striking parallel to the attitude of unbelieving scientists toward the universe.

idea of an absolute Moral Law, that is to say, a Moral Law binding on the conscience of all men. If conscience tells man that this is wrong or that is right, the evolutionist says that this is only the result of custom and the outgrowth of certain instincts. "Sin and crime are largely physical brain defects."

Remember that according to evolution, man is an animal. As Dr. Lyman Abbott said: "Man is an animal; concerning this there

can be no doubt." And John Fiske: "Theology has much to say about original sin. Original sin is nothing else but the animal nature which every man bears in himself." Observe how in the following the evil passions of man are declared to be simply remnants of our former animal existence: "As he stands before us in all his primitive shagginess, grasping his heavy wooden spear in the moonlight, he thrills us. This is our ancestor; this is the creature from which we evolved; this thing is bone of our bone, flesh of our flesh. We are stirred by his passions, urged on by his nameless instincts. Forty thousand years separate him from still lower animals. He stands close to us — this cunning, fighting, hunting, ferocious Neanderthal man." (Quotation from Professor Knight describing the cave-man.)

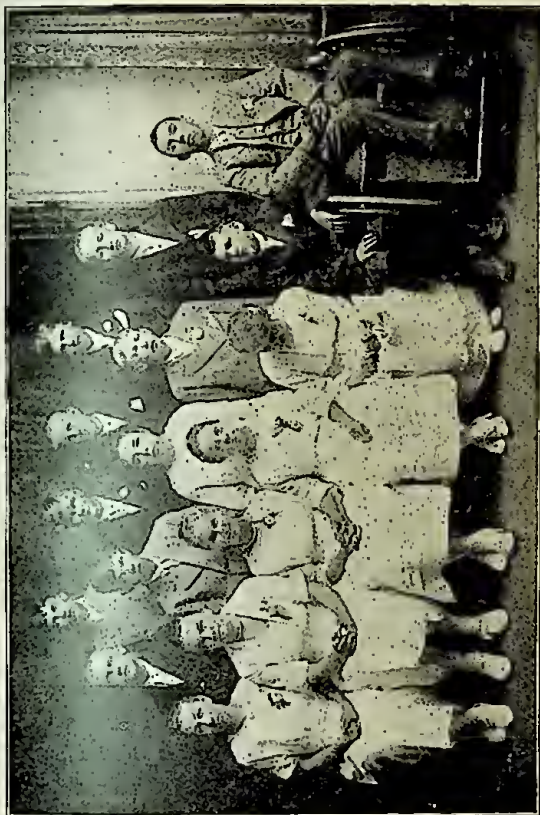
Sin, then, is held to be nothing more serious than the remnants of the monkey in man. There is no devil seeking to lure men to destruction.

Take God out of our thinking, and what remains of conscience? Disbelieve the existence of the soul, and what remains of a belief in the hereafter? If there is no life of rewards and penalties after death, then why walk the straight and narrow path, — thus reasons the brain infected with evolution. Indeed, being without a soul, man is really a mere *thing*. What he calls conscience is a mere movement of atoms in the brain. Do you suppose that those who hold such doctrines will feel a check on their greed, their passions, their instincts? What follows from this is that no man is responsible for his acts, and hence that no man is to be blamed or punished, even for crimes.

Evolutionists do not shrink from this last ditch. Dr. A. W. McCann quotes Robert Blatchford: "Suppose a tramp has murdered a child on the highway, has robbed her of a few coppers, and has thrown her body into a ditch, do you mean to say that tramp could not help doing that? Do you mean he is not to blame — not to be punished? Yes, I mean to say all these things, and if all these things are not true, this book is not worth the paper it is written on." Haeckel argues many times that man has an unquestionable right to end his sufferings by suicide; that we are justified by the use of a dose of painless and rapid poison, morphia, for instance, in killing lunatics, sufferers from cancer and other diseases, cripples, deaf-mutes, etc. The same doctrine has been announced lately by Mrs. Atherton in a magazine article. Mrs. Atherton says that the time is coming when "all morons [half-wits] will be painlessly destroyed." Get that, dear reader? How would you like to be one of a committee of six to select the half-wits in your town who are to be painlessly destroyed? They have even given this painless

destruction of sufferers from cancer, of the insane, etc., a Greek name, they call it "euthanasia," which means "happy death."

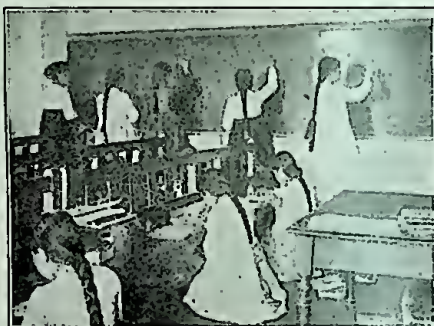
That the theory of evolution is contradicted by true religion and morality these few examples should suffice to prove to the satisfaction of every one, even of the high school teacher whom we



Evolution Says: "Destroy These Painlessly."
The Church has built an asylum to provide for these epileptic children.

have quoted. And while the evolutionary theory is not proved, the Christian religion has proved itself true a thousand times. Deny that the Bible is inspired, that Jesus spoke the truth when He proclaimed Himself the Son of God, and you are face to face with a greater riddle than any riddle of science or religion; you must then account for the fact that a book written by victims of all kinds of delusions has been able to elevate mankind wherever it is

read, liberating the mind, freeing it from ignorance and superstition, and enabling man to conquer the powers of nature, to conquer even himself. How is it possible that the book which works such tremendous results should be written by deluded fools? And how is it possible that One who only believed Himself to be the Son of God



The Only Power that Makes All Things New.

The Chinese mother in the upper picture boasts that she drowned several of her daughters at birth. Contrast with this the opportunities which the Gospel opens to Chinese girls in mission-schools. A change of this kind cannot be explained or effected by evolutionism.

and was crucified for His strange "delusion" should through His apostles in a few centuries destroy by His doctrine of love the very foundations of the Roman Empire and to-day, through His Gospel, rule every land in which life is worth living at all? Thus evolution raises greater problems than those of science itself and in this proves its own unscientific nature.

In his book *Descent from the Monkey* a German scholar, E. Lohmann, cites a number of cases which prove the insufficient character of the evidence being used by evolutionists. Much has been made of the great age of certain trees in order to disprove even the longest of Biblical chronologies. A hundred years ago Alexander von Humboldt found a tree of the species *Dracaena Draco* on the island of Teneriffe which had a circumference of 15 meters. Von Humboldt estimated the age of the tree at ten thousand years. Another tree of the same species was found on this island in 1857. Its trunk measured $9\frac{1}{2}$ meters. This same tree was again measured in 1884. It developed that in 27 years this tree had already gained $2\frac{1}{4}$ meters in circumference. Hence the specimen measured by Von Humboldt was then only about 210 years old!

The tooth of time has not been able to gnaw away a single sentence of the Bible. The schemes of ingenious wickedness have all proved signal failures. The efforts of pretended friends to cloister it in concealment, and of open enemies to crush it beneath the foot of malice, have been equally impotent. Ridicule, sword, and flame have all alike failed. The many books of infidelity have perished, with the exception of a few, which modern infidelity has much ado to keep alive. Hence its change of tactics. But here is the Book, now in larger circulation than ever, translated and being translated into all the languages of the earth, and by what it has done proves what it will do. This fact is not equaled in the history of any other book. Long since, judging by human productions, it ought to have perished by the force of adversities no other has ever passed through.

God is its Preserver no less than its Author. Deify this, and the Bible, with its history, becomes the most embarrassing of all miracles.

Every time a ship crosses the Atlantic, there is an additional proof that the science of navigation is a true science; and every application of an honest method of reason to Christianity proves it to be the embodiment of Revealed Truth, perfectly adapted to the highest welfare of humanity.

Revealed truth is a matter of fact, which took fifteen hundred years for its own completion in well-authenticated and well-preserved records. For nearly two thousand years it has not only established itself in the confidence of tens of thousands who have died for it, and of millions who have lived and labored for it, but has outlived its most demonstrative enemies. And in spite of all this violent opposition, the truth of the Bible now appeals to all men, as did the Master, "Believe Me for the very works' sake"; and every man is responsible for his neglect of this appeal.

Between Moses and John there was an interval of more than

Essays on Evolution.

fifteen hundred years, during which the whole of revelation was made. All the books were written amid the strangest diversity of time, place, and condition; they are written in different forms of history, biography, poems, and prophecy; yet there is an evident unity of design pervading the whole, which proves a unity of origin in some source not within the minds of the authors, but without. This Source controlled them so as to bring each man's thoughts to crystallize around the same thread extended through all these centuries, and especially with regard to the Messiah, the Hope of Israel. How is all this to be explained? Shall we say it may be accounted for by the infidel's suggestion that the Old Testament was forged to make people believe the New? This is not only absurd in itself, but plainly impossible, since the Old Testament was translated into Greek nearly three hundred years before the birth of Christ. Yet here the titles of the Messiah are all recorded and when brought together, make an anticipated biography of Him wonderfully minute and distinct for an outline. The supposition of forgery is therefore a monstrous foolishness. This question, then, pushes itself before us: How could such a variety of events be predicted by such a variety of men living amid such a variety of times and places, and not one of the predictions fail, as proved by correspondent events? There can be but one answer:—

The Christian religion is the truth of God!

3. The Permanence of Species.

"We dare not take our religion and our religious instruction from professed agnostics like Darwin and accept his reasoning against the inspired Word of God."

With this declaration the editor of a metropolitan daily, the *New Orleans States*, ranged himself on the side of the great body of educated Americans who are not ready to accept the doctrine of evolution. The *States* had previously been outspoken in its profession of belief in the Bible. Reacting on this stand of the paper, a student of the Louisiana State University addressed a letter to the editor which was published October 14, 1924. So characteristic of the mental attitude of many are the views set forth in this letter that I shall quote its line of reasoning.—This university student writes:—

"You misunderstand the word 'evolution.' In a correct sense I believe it is used to denote a change due to circumstances. For instance, you do a great amount of hard work, and soon you have horny places on your hands known as 'corns.' But if you do no work

your hands become tender. It was in such a manner that the hoof of animals was formed. The 'corns' after generation on generation formed the hoof. Is it not probable that the whale, finding life nearer the shore more congenial and free from dangers, lived there for a time, swimming away from shore when danger made it necessary, and finally becoming part fish and part land animal, that finally took to the seas?"

Two questions are suggested by this statement:—

I. What Is Evolution? II. Do Species Change as Here Described?

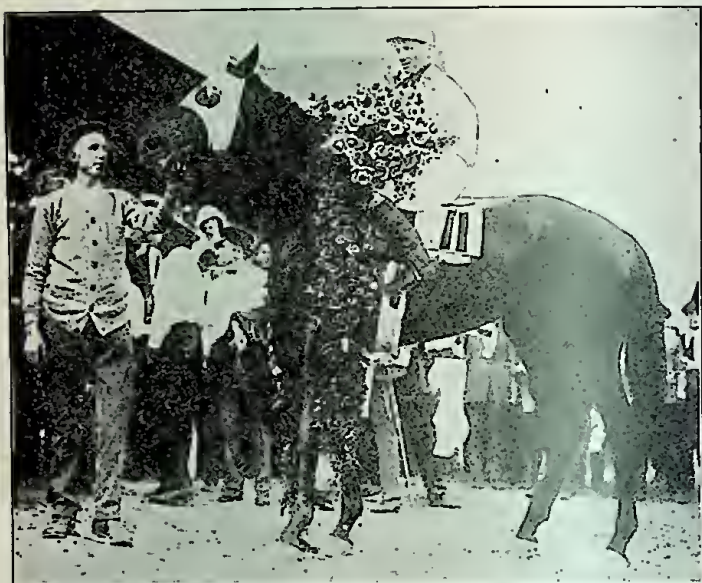
I.

Evolution is defined in this paragraph: "change due to circumstances." If this definition were correct, none of us would hesitate to accept evolution as a fact. That there is constant change in nature as in human society is evident. No one can deny that from simple beginnings we have complicated machinery. In this sense no one will deny that there has been an evolution. Consider only how the modern tractor and harvester have been developed from the original plow and threshing-flail; the ocean liner from the birch-bark canoe; the modern flour-mill from the original two millstones; the high-power rifle from the bow and arrow; the modern printing-press from the original chisel or goose-quill. Here is evolution, if you want to call it that. Even so we admit a sort of development in nature. The first, wild apple-tree was something entirely different from the modern juicy product of Pocatello. The Marshal Niel rose is developed from the ordinary briar-rose. Those wonders of the race-track, Zev and Papyrus, have been bred from wild, untractable ancestors roaming the prairies. Everybody knows about Burbank's plums and roses. And so if the change from wild to tame, from wolf-dog to St. Bernard, if the line that connects the wigwam with the steel sky-scraper, are to be called evolution, then we are all evolutionists.

But the strange thing is that the moment we pass the boundary of human activity, of human thinking, training, and striving, we strain our eyes in vain for a scrap of evidence in favor of evolution. Among the activities of animals there are no signs of development. The birds construct their nests, the beavers their dams, the bee- and ant-colonies carry on their complex operations, precisely as they always have done. Moreover, each of those creatures does its work perfectly at the very first attempt, whereas man makes innumerable failures before he can do anything even passably well.

Evolution, in the accepted sense, is much more than development. It means a change brought about in plants, animals, and in

human affairs *through the action of forces that reside in matter.* In the letter before us we find an intolerant attitude towards the miracles related in the Bible. The writer of it believes that the wonderful incidents related in the Bible may be "nice stories," but are pure fiction or fable. It is precisely in a mind of this type that the evolutionary theory will find a ready response. Much has been made by Mr. Bryan and others of the tendency which this theory has



(c) Underwood

**Zev — and Other Winners of the Race Track —
Not the Result of Natural Selection.**

Without the breeder's science the descendants of In Memoriam, Zev, and
Papyrus stock would in a few generations again be scrub ponies
of the prairies.

to destroy man's faith in the Bible. In far the greater number of cases, however, faith has long departed from the heart when a man becomes an evolutionist. Remember that submission to the historical truth of the Bible involves a submission to the Moral Law which it teaches. Man loves sin. He hates the Law of God. To get rid of this terrible taskmaster, the simplest short-cut is to deny that God gave this Law. Hence all those who prefer to lead an evil life seize with eagerness every doctrine which permits them to sin without fear

of future punishment. Hence a doctrine which does away with all miracles, with all laws, with creation, is received with much alacrity. And this is just what the theory of evolution does. It places, instead of the will and decree of a divine Creator, Natural Law. By reason of certain forces that are believed to reside in matter, all things have of *themselves* become what they are.

Evolution, then, is far more than simply a doctrine of development. It is a doctrine which permits God at one or two points to make a start, — as when life was created and when man received his reasoning powers, — but which treats God at best as an absentee God, who has nothing to do with human life and conduct. And since a God who is not active, creative, and self-revealed, is not God at all, the doctrine of evolution is very properly called a godless, atheistic doctrine.

II.

The young evolutionist refers to the gathering of "corns" (no doubt callouses are meant) on the hands, due to hard use. In this way, he says, the hard hoofs of animals have developed. This is, indeed, the contention of evolutionists. No one, to be sure, will deny that animals and plants change their form and even habits as they change their home (environment). Trees at the timber-line of the Rockies are stunted. Or compare the magnolia of Louisiana and of Illinois. But though climate and food may work changes also in animals, these changes never amount to the change or transformation of one *kind* into another *kind*. There is never an origin of a new *species*.

Ants have been found enclosed in amber said to be two million years old; yet these ants in the smallest detail are like ants of to-day.

To the present day, microbes possess a simple form, like a comma, a ring, etc. Since the universe was first made, they have not changed their form or habits.

Even species closely related have existed from the beginning. The dingo, or wild dog, of Australia is a true dog in every sense as to structure, habits, etc.; yet he is found in fossil forms embedded in the rocks, which proves that he existed as a separate species from the oldest times. By selective breeding we have produced numerous *varieties* of dogs, chickens, pigeons, etc., from one or two common stocks, but we have never succeeded in getting any of these to cross the line of *species*.

By cross-breeding species it is possible to produce new species which will endure for a time, but which invariably die out. These are called hybrids. Of the 40,000 "blackberry plus raspberry" hybrids obtained by Burbank, only *one* is still in existence. The strange thing is that the hybrids cannot reproduce! Thereby falls the whole

theory of natural selection; for even if species are crossed and a different animal results (as, for instance, the mule), the development stops right there, because these animals are neuters (unfertile).

If the study of plants and animals has proved anything, it is that in the state of nature, animals do not change into new species. Everybody knows that if the artificially cultivated pouter or carrier-pigeons are turned loose and allowed to mingle with others, their offspring in every case after a few generations will be the blue rock pigeon with the three black bars across its wing, from which all pigeons are descended. If it were not for continual scientific breeding, our noble full-blooded horses, our feathered aristocrats—chickens, pigeons, ducks,—would soon again be the scrub beasts from which they were developed by the direction and oversight of man. The immense herds of mustangs roaming the prairies of the West and South in the past were descendants of noble Spanish horses reverted to a state of nature after the withdrawal of the cultivating hand of man.

The same applies to animals in a state of nature. One example must suffice. In certain Austrian caves exists a blind fish called *proteus*. Due to the absence of light, the eyes of the *proteus* have completely disappeared, the skin being unbroken by any mark where the eyes usually are. In 1914 a Vienna zoologist, Dr. P. Kammerer, took some of these fish into an aquarium when they were newly born. To the amazement of European scientists these specimens of *proteus* grew eyes, perfect eyes, with lens, retina, and the necessary muscles to move the eye-balls! Furthermore, by observing the motions of these fish when worms were dangled before them outside the aquarium, it was absolutely proved that these eyes could see. This is one of the most famous experiments in the history of biological science. It conclusively proved that species never permanently change their form in a state of nature. Countless generations of *proteus* have been blind, eyeless. Yet under normal conditions the eyes again were there.

And so, wherever the tests are made, it is proved an undeniable fact that species do not evolve. They are what scientists call "fixed." The modern ox has not derived his hoof from callouses on his toes. It is very easy and simple to say that the plants and animals have acquired their form and colors through use, that what was useful to preserve life again appeared in the offspring. But while a fine theory, not a vestige of proof has ever been produced that this takes place, and the greatest British authority on heredity, Dr. Bateson, said only four years ago: "That particular and essential bit of the theory of evolution which is concerned with the origin and nature of species, remains utterly mysterious."

4. The Barrier of Instinct.

We called him Archibald. He had been caught in a V-trap half-way up a hill on the banks of the Big Piney River. When we brought him down to the cottage, he was "playing 'possum." Naturally. He *was* an opossum.

The opossum is not a very pleasant companion, for his odor is a trifle strong. We kept Archibald three days, then carried him up the hillside one evening at dusk, and he quickly disappeared up a giant oak.

Archibald's habits and appetite were a mystery to us. But he and his tribe are an even greater mystery to the evolutionists. In their writings they give him a wide berth. This extraordinary creature has a tail covered with scales, like the tail of a rat, but, unlike the tail of a rat, he can suspend himself with it from a branch, as by a fifth and powerful hand. All the toes are equipped with claws, except the inner toe of the hind foot, which acts like a thumb. In his jaws there is one more wisdom-tooth than is possessed by any ape. The female is provided with a pouch in which the young, after birth, are nourished. According to the doctrine of evolution all existing species are the descendants of common ancestors, from which they diverge in various degrees. The only animals related to the opossum are the kangaroo of Australia! So the evolutionist must assume that, independent of each other from some far-away ancestor, the kangaroo developed its pouch in Australia and the opossum its pouch in America! We are not surprised that evolutionists avoid all discussion of the animal; for it is absolutely necessary to find some connecting link between the opossum and the other four-footed animals, and this is impossible. Furthermore, the problem is complicated by the fact that Archibald's cousin, the kangaroo, had ancestors, now found as fossils in the rocks, of monstrous size. Whereas the horse is said to have developed from a five-toed animal the size of a cat, the kangaroo represents an evolution from larger to much smaller forms. And so when the question of these "marsupial" animals is approached, the evolutionists wisely—"play 'possum."

This trick of the opossum, by the way, is one common to all wild beasts. When you pass unexpected by a squirrel or a chipmunk, he "freezes," as the naturalists call it. While danger is nigh, the animals are absolutely rigid. I have thus seen the mink "freeze" on the river's edge when it saw me at dawn in the fishing-boat. Turtles and moecasin snakes, frogs and lizards act the same way, as well as all wild birds and most insects. Why do they do it? So as not to be noticed. But why escape notice? Because to attract attention

might endanger their lives. This the wild beasts know. Has experience taught them? Certainly not; one "experience" of this kind would mean death to them. The opossum shams death, wild animals take a rigid position ("freezo"), *by instinct*. We say this so lightly, rarely thinking how great a mystery the word covers.

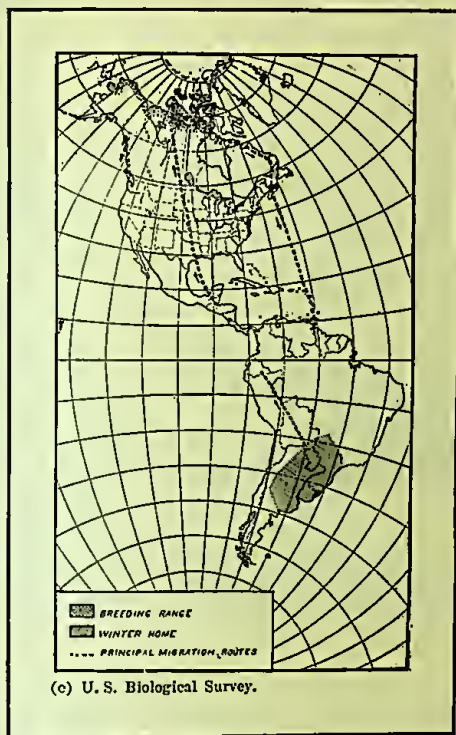
By what process of evolution, do you suppose, have these instincts been developed in animals? (For according to that theory everything has been evolved.) The problem is a serious one, for on the functioning of instinct depends the very existence of all animals and, through them, a great part of the vegetable world. If the instinct does not "work," the animal dies; not immediately, but most certainly. The life of the animals, from the greatest to the least of them, depends upon instinct.

There is the water-spider. It lives under water and rears its young under water. It spins under the water an egg-shaped water-proof skin, or envelope, open underneath. When finished, it goes to the surface, and with its hind legs, which are covered with hair, it takes hold of a large bubble of air, carries it down into the water and releases it into the house, thus expelling a quantity of water. This is continued until the cell is filled with air. In it the spider lays its eggs and rears its offspring. The water-spider does all this *perfectly* the first time. *Unless* its instinct directed it with such utter perfection, it would never have living offspring, and the species would die. By what means could such instincts be developed?

Only three years ago the mystery of the European eel was solved. A Danish expedition, 1921—22, sent out to investigate the depth of the ocean, supplied the answer to the question: Where do the eels rear their young? Every year great masses of tiny eels appear on the coast and enter the streams. There they live and attain their size. Where have they come from? The Danish scientists have discovered that the eels have their breeding-places in the ocean, south of the Bormudas, at a depth of 25,000 feet! Starting from the European rivers, the eels travel more than a thousand miles to these ocean depths and there lay their eggs, which during three years develop into small eels. During these three years they move towards the coast of Europe and there enter the rivers. That the instincts necessary for all these operations should have been evolved through natural causes ("by chance") requires more faith, it seems to me, than to believe in the creation and preservation of living things by an almighty Creator.

The migration of birds at certain seasons is something with which we are all familiar. But when you see the ducks going South in the fall, do you ever consider that this is one of the greatest mysteries of nature? Alfred Newton has said: "We are here brought

face to face with the greatest mystery which the whole animal kingdom presents." The night-hawk travels from Alaska to Argentina, 7,000 miles! The golden plover, whose home is the Arctic Circle, travels over land to Nova Scotia, thence 2,400 miles across the ocean to South America. Endless theories have been supplied



The Range of the Golden Plover.

The longest-known single flight of any bird is that of the Golden Plover over the ocean from Nova Scotia to South America, 2,400 miles.

Who taught it the way?

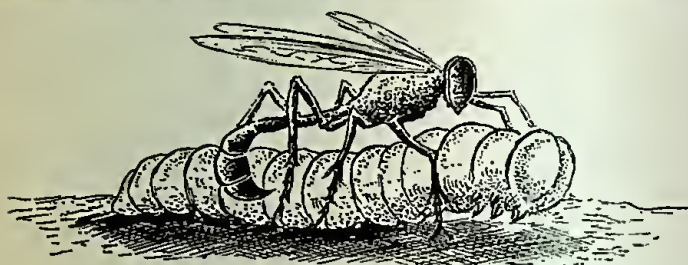
in order to account for this migration instinct, but there is no solution. Any one can see that the despair of evolutionists to explain how such an instinct could evolve is well founded.

Polecats (skunks) will, to feed their young, instinctively catch and mutilate frogs and toads so that they cannot get away, while

they remain alive and therefore fresh and good for food. On one occasion as many as forty frogs and two toads were found in a hole beside a nest of young polecats. They were alive, but only capable of sprawling a little, because they were all dexterously bitten through the brain.

An analogous instinct is possessed still more perfectly by a kind of wasp. It will pounce upon some caterpillar or spider and sting it so adroitly as, without killing it, to destroy all its power of motion. Then it will place it in its nest beside its egg, out of which comes in due time a grub, which feeds on the victim, while the grub itself is so helpless that it would be quite unable to deal with its prey had its prey not been thus previously paralyzed.

The female carpenter-bee, in order to protect her eggs, excavates in some piece of wood a series of chambers, one above another,



Wasp and Caterpillar.

Wasp paralyzing a caterpillar. If the caterpillar died, the young wasps would be without food, since the dead caterpillars would shrivel up. By paralyzing the caterpillars, the wasp makes sure that they will not get away. How could such an instinct be developed? What good would it do if half developed?

separated by partitions, the lower chamber communicating with the exterior. She lays an egg in each chamber, beginning with the lowest. From the lowest chamber the offspring—the grub—escapes by the passage left for it. The inhabitant of the chamber next above gnaws through the floor of its dwelling and makes its way out by the same path as did its predecessor. The inhabitants of the superior chambers then act similarly in succession. Evidently this complex nest harmonizes in a most admirable way with the needs of the grubs, which had hatched in order of age, the oldest, or one first laid, being the first. But it is no less evident that the young mother could have no knowledge of the series of actions which were to ensue after she had completed her nest.

The larva of the emperor-moth, when about to become a chrysalis,

spins for itself a double cocoon, but leaves an opening fortified with elastic bristles, which point outwards, so arranged that, while they readily yield to pressure from within (allowing the moth to make its way out easily), the bristles firmly resist pressure from without.

As most persons know, moths and butterflies habitually lay their eggs on the leaves of such plants as will nourish their young, although the parents do not feed upon them or use them in any way. It may even be that the parents do not feed at all, and it would be too unreasonable to affirm that they can recollect what they did before



(c) From Kellogg, *Animal Life*, Appleton.

How Do They Do It?

The beaver fells trees, builds dams across streams, and builds elaborately constructed villages of several-storied houses. The beavers do all this by instinct. They do not learn, they simply know how.

they entered upon the chrysalis condition, and that they consciously foresee that their eggs will give forth creatures such as they once were. Still more monstrous, however, would it be to affirm that a grub could foresee the shape of the body it is destined to have when transformed, especially when the shape is widely different in the two sexes. Yet the grub of the female stag-beetle, when she digs the hole wherein she will undergo her metamorphosis, digs it no bigger than her own body; whereas the grub of the male stag-beetle makes a hole twice as large as his own body, in order to leave room

for the enormous jaws (the so-called "horns") which he will have to grow.

Can we believe that the wasp which seizes spiders and caterpillars, *accidentally* stung them each, respectively, in the exact, but very different spot needful to induce paralysis? Certainly the wasp knew nothing of the internal anatomy of its prey. It is also incredible that the complex excavation of the carpenter-bee is either due to an accident or to a calculation as to the future.

Now observe that evolution means development by many slow stages. But how could instincts preserve life when they were as yet incomplete? The opossum shams death. If that trick had not at first been made so perfect that the enemy's attention was eluded, it would only have made the animal's extinction the more certain. Unless the complicated system of instincts which exists in the bee-hive had been functioning perfectly from the beginning, there would be no bees to-day. In the hive is a queen, whose only work is to lay eggs. There are the drones, whose only function is to fertilize the queen; and there are the workers, which have no sex. These workers build the hive, collect the honey, rear the young, all by instinct; yet they could not derive these instincts from their parents because their parents are not workers, but queens and drones. Study the problem a little bit, and you will understand that the instincts of the bee, *not being inherited*, cannot be the product of evolution, which absolutely depends on heredity. Furthermore, if these instincts had been only half developed at any time, the hive would have perished. Even if the bee knew that it must have honey and wax, and where and how to get these substances, but, coming back, would feed the wax and try to build walls with the honey, the queen would never have cells or food for her eggs to hatch in.

Instincts, it has been truthfully said, furnish the positive proof that evolution is not only an impossibility, but an absurdity.

5. Evolution and Disease.

If the Bible-story of creation is true, Adam must have "survived for 930 years all the germ diseases which afflict men to-day," says one Dr. Charles W. Stiles according to an address widely heralded when it was delivered, in 1923. Dr. Stiles is said to be a "noted zoologist and scientific research worker," and evidently stands committed to the theory of evolution. His statement is part of the *barrage* which scientists of major and minor prominence were then laying down against Mr. W. J. Bryan's assaults upon the theory of evolution. In order to make him and all Bible Christians look

ridiculous, Dr. Stiles points out that unless the disease germs came into being by a process of evolution, Adam must have borne them in himself,—tuberculosis, smallpox, yellow fever, pneumonia, and all the rest. And still he survived 930 years.

Dr. Stiles is just an ordinary scoffer at the Bible narrative, such as the Church has had to contend with ever since the days of Porphyrius and Galen, in her first age, and down to the present time. Unbelievers always listen to such attacks with undisguised delight, and the press dispatches, which gave half a column to the Stiles address, provided much merriment for the ungodly everywhere. What shall we say to the argument there raised?

Not an Evolution of Germs, but a Devolution of Man.

Mr. Stiles bases everything on the assumption that "if it is to be conceded that germs which cause disease were originally created in some form other than disease germs, the theory of evolution stands admitted." But how if there exist even now disease germs which were certainly not created as such? Does Dr. Stiles know the peculiarity of the tetanus (lockjaw) germ? When the germ exists in the rust coating of an old nail, does he call it a disease germ? Will he assert that it must have existed in the body of Adam in order to exist to-day? He knows the life-cycle of the yellow fever germ and of various malaria germs outside the human organism. When they live in the body of a mosquito,—which suffers nothing from their presence,—are they disease germs? Do these, and the tetanus bacillus, and the organisms that cause bay-fever, and others, not become disease germs only as they enter the human body? What should prevent us from accepting the proposition that they existed from primordial ages, and only when man's body had become subject to disease, after the Fall, became active as carriers of that physical change which sets up lockjaw or malaria? Certainly, unless one denies offhand the Bible-story of Creation, there is nothing unreasonable in believing that disease germs existed from the beginning, being created like the rest of the vegetable kingdom (most of these minute structures being vegetable in nature), and only later, as they were able to enter the tissues of man with disintegrating influence, becoming active causes of disease.

The Doctor mentions the meningitis germ, the pneumonia germ, the tapeworm (strange classification!), the infantile paralysis germ, the tuberculosis and typhus germs. He knows, of course, that *animals* are subject to all these diseases. Does it require a process of evolution in these organisms in order to render man subject to them? Is it unreasonable to suppose that the change—a *devolution*, indeed,—took place *in man*? That man was once, in his state of

innocence, immune to them, but later became subject to their ravages? Stiles mentions, with a sneer, the 930 years of Adam. To the Christian believer there is an indication in the great length of life of the men who lived in the first two thousand years or more of Bible history, of an original immunity of men to the diseases that later reduced their span of life to some fourscore years. Certainly it requires no evolutionary process to account for the gradual invasion of many germs that existed in plants and animals and upon minerals into man's organism. The change, in other words, took place not in the germ, but in man. Even to-day we find that some men are immune to certain diseases, while others are not, that some germs attack only children, but not adults. In such cases, has the change taken place in the bacilli or in man? Certainly it is not a difference in the germs, but in the varying powers of resistance in man that accounts for the difference. The writer is only an amateur in medicine, but he knows that much, and so do his readers, whether they be medical men or not.

Germes May Change Properties, but Do Not "Evolve."

On the other hand, it is easily shown that certain changes do take place in the ability of germs to set up disease. Their properties change. They may be harmless, but become very dangerous. And some of the once most dangerous have lost much of their deadly power. Once harmless, or producing nothing more serious than a bad "cold," the grippe or influenza germ within most recent memory became one of the most terrible of all pathogenic agents, slaying in the one year 1918 more than ten millions on all continents. (Again, its properties for evil seem to have lost their strength, and when the last epidemic took place, this was generally remarked upon.) So it is clear that some small organisms may *become* fatal disease germs.

Does Dr. Stiles take into account the varying virulence of the diphtheria, the typhoid, the smallpox, the scarlet fever, and the measles germ? Evidently, in such cases, and in others that could be mentioned, an actual change has taken place in the power of these germs to set up those changes in the human body which we call disease. What shall prevent us from assuming that only through being able to develop unchecked in various generations of men they have acquired their death-dealing property, even as, conversely, through checks placed upon their development, as particularly in the case of smallpox, they have again to a large extent been robbed of these same properties? Harmless in the beginning, let us assume, the germs just mentioned have gradually become agents of disease. Would Dr. Stiles call this evolution? Then he is working with

a definition of evolution which no evolutionist would accept. Evolution is one thing, development another. That animals and plants may be *developed* no one denies. The race-horse and the bulldog, the grape-fruit and the navel orange, at once occur to us as examples of development. But horse and dog, no matter how highly developed, never have as a starting-point anything else than horses and dogs — not crocodiles or bats. And the disease germs that have developed qualities that now classify them as such are not, for that reason, products of evolution, but have in the course of time acquired those properties which make them harmful to man, even as they lose these same properties to a large extent, sometimes under the effect of counteracting measures, as is very evident in the case of the smallpox germ.

Whence, then, disease germs? We do not know; but more *reasonable* than the unproved evolutionary hypothesis are the lines of thought developed above. Originally either harmless or existing outside of man, in animals, plants, and minerals, they have, through the breaking down of man's disease-resisting powers, from the Fall to our day, entered this province and have now become agents of death.

Dangerous Ground.

If Dr. Stiles will look into a recent volume of the scientific monthly *Nature*, he will find a record of some interesting observations upon the diseases with which certain fossil fish were affected during their lifetime. He will note, too, that these diseases were the products of germs, and that these germs are identical with certain pus-producers to-day. Hence, at least, he ought to have made a specific exception in the case of streptococcus and staphylococcus when he enumerated the germs which inhabited the body of Adam. He ought to have admitted that, on paleontological evidence, at least these existed before man and must have originated not in man, but outside of him and been introduced later.

Evolutionists will give this same subject of germs a wide berth, if they are wise. The reader will forgive us if we become a bit technical here. Evolution is, according to evolutionists of every school, possible only through the transmission, from parent to offspring, of favorable variations. Thus the feather of the eagle's wing, the eye of the fly, and every organ in every plant and animal are said to have been evolved. Hence the evolutionary process depends absolutely upon the frequency with which animals reproduce in a given time. Hence, again, the changes will be very slow where the generations are long, as in the case of the elephant, or certain parrots, while in animals which reproduce once a year or even oftener, the chances for evolution are in the same ratio more favorable.

Now, the germs which are under discussion, reproduce, on favorable soil, as the diphtheria germ in the throat of a child, thousands of times *in a day*. Hence it follows that in a thousand years the chances of an elephant to evolve from a parent species are *as one is to countless millions* compared with the opportunity of a tetanus or diphtheria bacillus. But it is a marvelous fact that these bacilli have changed in no particular since the days of Greek and Roman medical diagnosis, the descriptions of diseases recorded two thousand years ago tallying exactly with the diagnosis made to-day. Yea, even the diseases from which Egyptians died 2000 B.C. can be definitely established by expert examination of their mummies. In other words, those very organisms which, on account of their rapid multiplication, possessed opportunities for natural evolution incalculably higher than any other plant or animal, have not changed in any particular in historic and even, as in the case of the fossil fishes referred to, since prehistoric times!

I fear that by raising the issue of disease germs, Dr. Stiles has, as we say in common parlance, "caught a Tartar."

6. The Assured Results of Science and Dr. Einstein.

(Letter to Timothy Smith, High School Junior.)

DEAR TIMOTHY:—

And so your physics teacher has told the class that, after all, force and matter are sufficient to explain all existing things, and that a creation through the Word of God, as described in Genesis, is an outworn idea disproved by the "assured results of science."

Now, instead of going into an argument on the subject, just let me tell you what I heard at a meeting of the American Association for the Advancement of Science here in St. Louis. But before I tell you about it, just take this from me as a rule which you will find true, no matter how deeply you may hereafter delve into science: It is not science that contradicts the Bible, but the scientists. Stated in another way: Not the facts of science, not what you find in the test-tubes or see through the microscope, but certain speculations built upon such data, are out of harmony with the Bible. One may be a great scientist and remain a Christian. But let me tell what I heard at the A. A. A. S. meeting.

A lecture on the Einstein Theory of Relativity had been announced. The lecturer was Dr. Ames, president of the Physical Section. Now, do you know what it means when a man is president of the Physical Section? It means that this man is by common consent recognized as one of the foremost physicists, if not the

foremost, in the country. Ames is professor in Johns Hopkins University, and has been made honorary member of the Royal Institution.

We went to hear the great Dr. Ames and found ourselves in a company of university professors from all over the country. Dr. Ames spoke about an hour; fine enunciation, poor elocution, like most university men. But we followed him closely, and I assure you what he said was worth listening to. He said Dr. Einstein was professor in Kaiser Wilhelm Institute in Berlin when he made his great calculations. We were all duly mortified, but the lecturer soon consoled us by saying that Dr. Einstein is "not a German, but a Swiss Jew." The first statement which really startled us was that "centrifugal force" is a "merely fictitious thing." But then we remembered that our physics teacher in the dim backward and abyss of time had told us that "really" there was no such force; only a convenient term. But matters soon became very serious indeed. Dr. Ames made this statement: *Gravity has no reality; it is but "the result of transformation of your axes."* Put a pin there, Tim: Gravity does not exist. This looks bad for the theory of physics. Nay, it knocks the bottom clean out of it. Next came this, uttered in a quiet voice: "Einstein proved that *energy has mass.*" Every university man present knew that this statement, if true, blows into infinitesimal atoms the whole theory underlying present science. They gasped audibly. You may not fully understand the full import of those six words, but let me say that, if they are true, if energy has mass, no more startling reversal of all that we held to be true regarding the ultimates of science has come to mankind in modern history. Finally, Dr. Ames said: "We note, in conclusion, that a number of old friends have disappeared. *There is no force, no potential energy, no ether.* Force,—we need the term, but it stands for no reality. Potential energy,—nonsense. Ether disappears; you may still use the term in your classrooms, but it stands for nothing." (I have quoted the lecturer literally.) Consider what this means. 1) "Force" is the basic concept of physics. When we observe that a body moves, we call the cause of such motion, *force*. Now, according to Einstein, force does not exist. 2) Every text on physics says that energy may exist as a stored-up condition; the stone lying on a shelf has potential energy; if it falls, it exerts kinetic force; but that force was "potential" while the stone was at rest on the shelf. "Nonsense," says Dr. Ames; "there is no such thing." 3) "Ether," of course, has never been seen; but all physicists have these many years maintained that it is a *necessary assumption*; light vibrates, as it comes to us through space; since there must be

a medium of vibration, we call that medium ether. Fairbairn says in his *Organic Evolution*: "Science regards the existence of ether as certain—as a matter no longer to be called in question." And so we all said until Einstein spoke. Now we know there is no ether of space.

I might tell you much more. The fourth dimension figured prominently. Fifteen years ago, the man who speculated in the fourth dimension was an object of compassion to his friends; they would shake their heads and say, "Too bad for Jack, getting those bats in his belfry." Now we hear a great scientist discuss the fourth dimension as familiarly as if he had trained it to eat out of his hand.

But the point is this: The theories which your high school professor still believes in, and on the basis of which he tells you that all things came into being simply "through *force* acting on matter according to certain *laws*," are completely demolished by Einstein. *Force*—there is no force! And the *laws* of nature have never been understood.

But this is only half my story. On my way home on the street-car I bought a paper. Through some fourth-dimensional activity of a reporter it already contained a report on another lecture which had been delivered that same afternoon in the same building in which we had our gravity, ether, etc., removed from our system. And what do you suppose this lecturer announced? A new theory of the universe which "*completely disproves the Einstein theory*"!!! He has "been able to determine the exact nature of the *ether*," and furthermore, he has almost perfected a machine by means of which force is extracted directly from the air, so that a cheap apparatus will heat our houses without the use of fuel, and cool the ice-box without the use of ice. No, this is not a report of observations in the psychopathic clinic or padded cell; it was a lecture delivered before the Section on Mathematics of the A. A. A. S. by Dr. H. H. Platt of Philadelphia.

As between Dr. Ames and Dr. Platt, we may well permit the members of our high school faculties to settle the matter between themselves. One of the university professors, on leaving the ball, said to me, with some feeling: "I shall continue to teach my class that light undulates through ether, won't you?" He may, but he will have an uncomfortable feeling that he *may* be teaching his class "unrealities," "nonsense."

Well might Dr. Ames say that the first approach to understanding the Einstein system is "like discovering a new continent." He added that there may be truth in the statement that only ten men in the world are able to follow Einstein's mathematical demon-

stration; "but by spending a few hours a day at the matter, I hope, by and by, to be the eleventh or twelfth man." The point is not what I think of the lecture, — which was magnificent, for all its poor delivery; or of the Einstein theory, — which brings such changes into scientific thought that it requires the utmost stretch of the imagination to conceive of them; the point is, — *where are now* the "assured results of science" on the basis of which your professor asserts that the story in the first chapter of the Bible is not true? That assurance has gone glimmering together with faith in ether and potential energy.* Q. E. D.

Continue to study science, Timothy. Physics is a wonderful subject. Understand that I have been careful to say that the *theory* of physics has (very probably) fallen. Science, experimental science, has achieved great things, and will achieve greater if the world stands. But do not permit men to raise doubts in your mind concerning the Bible by urging the *theories* of science; these, it seems to me, have received a mortal wound. Give your attention to science; but remember "we also have a *more sure word* of prophecy; whereunto ye do well that ye take heed, as unto a light that shineth in a dark place." 2 Pet. 1, 19.

7. Haeckel's Fictitious Links and Certain Pliocene Remains.

In 1922 a tooth was found on a Nebraska farm. The finder was congratulated as though he had found a pearl of great price. A long Latin name was given to the tooth, and Professor Osborn, of New York, talked poetry. The news of this tooth was cabled all around the world. Let all the earth rejoice, another proof was found that we are first cousins to the monkey!

When a brain-pan and a hip-bone were found in Java, Professor Haeckel, of Jena, traveled thither all the way from Germany in order to feast his eyes upon the sacred spot where the bones of a real ape-man had lain. Had he, Professor Haeckel, not prophesied the *Pithecanthropus Erectus*? And here he was found! — at least his brain-pan and a few assorted leg-bones.

Our high school boys and girls are still being told that our ancestors were apes which dwelt in the trees. In the normal school they study Crampton's *Doctrine of Evolution*, which says, page 155: "Human evolution has already been proved beyond question," or

* Dr. Ames said repeatedly that Einstein's conclusions were "not theory," but statements of demonstrable facts, mathematically arrived at and proved by observation!

Dr. Daniel W. La Rue's *Psychology for Teachers*, p. 32: "We are all descended from a simple, wormlike creature." Or they will read a Funk & Wagnalls folder, which says: "Suppose you were in that particular stage of evolution in which man had just discovered the use of the club" — etc.

The evolutionist indignantly disclaims the present apes, or monkeys, as ancestors. He tells us the connecting link was a creature superior to these, though inferior to man as he is now constituted. Professor Morris, in his *Man and His Ancestor* (p. 67), gives a full description of this unseen and purely imaginary ancestor of our race as follows:—

"It [the missing link] was probably much smaller than existing man, little, if any, more than four feet in height and no more than half the weight of man. Its body was covered, though not profusely, with hair; the hair of the head being woolly or frizzly in texture, and the face provided with a beard. The face was not jet black, like a typical African, but of a dull brown color, the hair being somewhat similar in color. The arms were long and lank, the back being much curved, the chest flat and narrow, the abdomen protruding, the legs rather short and bowed, the walk a waddling motion somewhat like that of the gibbon. It had deep-set eyes, greatly protruding mouth with gaping lips, huge ears, and general apelike aspect."

You may be astonished, reader, that any one could penetrate the dim vista of "millions of years ago" and transcribe so detailed and circumstantial an account of what then existed.

Nor can we blame the text-book writers for being so cock-sure when even Professor Haeckel went so far as to say that we are as sure about the animal ancestors of men as we are about the persons of Caesar and King Alfred. However, let us investigate and see on what kind of evidence this dead-sureness of certain evolutionists is based.

It is true that Professor Haeckel has "traced" the human race back through more than twenty stages to the earth-worm. But it would pay you to look up his three volumes on the descent of man and see how he does it. At the bottom of the series he describes six *imaginary* stages before he arrives at the earliest worm! He supposes that there lived a class of animals which he calls *gastraea* because they are required as ancestor for the *gastrula*, itself an imaginary being! Everybody knows that there is no evidence of an animal between the backbone and no-backbone animals; yet Haeckel in his list has No. 8, the *chordonia*, which he calls "undoubtedly" the ancestors of the backbone animals. He needs a link between the amphibia (land-water animals) and other beasts and so makes No. 14 the *sozura*. They are "proved" to have existed because they are

needed as a link. And so we get the *prodidelphia*, of whom, Professor Huxley remarks, "We have not at present the slightest knowledge." But these beasts are necessary in the line of human development, — they *must* have lived in order to complete the chain. No. 21 is the ape-man, not yet found, although the name was given by Haeckel to the skull and hip-bones found on Java.

It cannot be asserted too strongly that for this descent of man from the brutes there is at present no proof which goes beyond these bare assertions of Haeckel, and it is a lasting disgrace to biological science that these volumes of Haeckel could have been paraded as true science. Professor Wood of Dartmouth College said only last year: "No fossil or organic half-man has ever been discovered." And again: "The fact of the matter is that there is no evidence that man as man has been evolved out of lower natural forms or organisms." There is, of course, the Neanderthal man, the Piltown, the Rhodesia man, each of them consisting not of a complete skeleton or even as complete skulls, but as fragments of bone, concerning which there is the utmost disagreement among scientists. Prof. Johannes Ranke, a specialist of the first rank, has thrown out all proof from fossil remains, and Erich Wasmann, another famous scholar, says in his book *Modern Biology and the Theory of Evolution* that the whole pedigree of man as once taught by evolutionists "has not the support of a single fossil species."

It is true that in the Natural History Museum at New York, Professor Osborn has constructed casts of plaster and cement showing just how the brute ancestors of man looked. And in his *Outline of History* Mr. H. G. Wells, the British novelist, treats all these various stages as if they could not be denied. There is the Neanderthal skull, a piece of bone found in a Westphalian cave in 1856. Does the ordinary visitor to Mr. Osborn's cement menagerie realize that there are now twelve complete opinions regarding the original of this skull? The original Neanderthal man has been variously described as an idiot, a Mongolian Cossack, an early German, an early Dutchman, an early Frieslander, a relative of the Austrian Blacks, a stone-age man, a primitive ape-man, etc., etc. But the reader will be treated to the details of fossil human or pre-human remains in a later chapter.

To what length even reputable scholars are forced by their theories, appears from the startling hypothesis lately put forth by such scientists as Soddy, Joly, and Strutt, who assert that a super-race of men, a million or more years ago, inhabited earth, mastered radium, learned how to realize its energy, and migrated through space to a globe with better conditions for intellectual expansion! Thus are the wise made foolish in their own conceits.

In a paper read at the Victorian Institute in London, Dr. A. T. Schofield said in April, 1922: "Some Japanese fossil skulls just discovered, and some others of very remote date, have actually a larger brain capacity than the average brain to-day. I believe it has been gravely suggested that at that time their owners were becoming men, and the effort was so great that extra brain capacity was required for this purpose. This illustration shows how ridiculous such attempted explanations may become."

On scientific grounds it has lately been held that man is more "primitive" than the higher apes, that the monkey is really descended from man! Thus Dr. Wood-Jones of England in 1918 wrote: "Far from being a descendant of the apes, he may be looked on as their ancestor. . . . Indeed, from the point of view of anatomy I conceive it to be impossible to take any other 'view.'" (*The Problem of Man's Ancestry*, 1918, pp. 38.39.) Please note that these views were set forth before the University of London and were based on the most recent anatomical research.

From the beginning the mistake was made of comparing only the skull of man and apes. More recently the entire structure of man and the brutes has been more carefully studied, and it has been discovered that it is impossible to derive the body of man from one single type of apes. And so Professor Mivart says in *Lessons from Nature*, page 176: "If man and the orangutan are diverging descendants of a creature with certain cerebral [brain] characters, then that remote ancestor must also have had the wrist of the chimpanzee, the voice of a long-armed ape, the blade-bone of the gorilla, the chin of the siamang, the skull-dome of an American ape, the hip-bone of a slender loris, the whiskers and beard of a saki, the liver and stomach of the gibbons, and a number of other characters in which the various several forms of higher or lower apes, respectively, approximate to man." Let us grip on to these facts, for facts they are. Identifying a tooth or a leg-bone is now regarded by specialists of the first order as an impossible procedure if the object is to identify man with the brute. If there had been any derivation of one from the other, it would be the ape that shows signs of descent from a nobler stock. Is it not best to come back to the Bible and accept its plain teaching that, whereas animals were created each "after his kind" (species), man was made in the image of God?

It would seem to us that the discovery of human remains in Pliocene rock, mixed with the remains of tools and other implements, would convince the Darwinians that they have been barking up the wrong tree. Let me explain.

Certain layers of rock are called Pliocene.* They are thought to be very old, millions of years, in fact. All the so-called human remains and fossils above referred to have been found in the soil and not in the rocky layers of the earth's surface. In recent years, however, human fossils have been found in the so-called Pliocene strata. In what seems to be undisputed upper Pliocene layers, J. Reid Moir, the British archeologist, recently has discovered a workshop, or flint worker's floor, sixteen feet below the present surface of the ground. From this floor he has taken a large number of

* The following table shows the major divisions of geological time as divided into eras and periods: —

<i>Age</i>	<i>Eras</i>	<i>Periods</i>	<i>Life-Forms</i>
CENOZOIC	Quaternary, or Post-Tertiary, or Pleistocene	Recent Terrace Drift (Glacial)	Man
	Tertiary	Pliocene Miocene Oligocene Eocene Paleocene	Mammals
MESOZOIC	Cretaceous	Upper, or Cretaceous Proper Lower, or Comanchean	Reptiles, Conifers, and Palms Dinosaur
	Jurassic	Upper (Malm) Middle (Dogger) Lower (Lias)	
	Triassic	Upper (Keuper) Middle (Muschelkalk) Lower (Bunter Sandstein)	
PALEOZOIC	Permian	Upper Lower	Amphibians and Coal Plants
	Carboniferous	Pennsylvanian Mississippian	
	Devonian	Upper Middle Lower	Fishes and Insects
	Silurian	Upper, or Monroan Middle, or Salina Lower, or Niagara	
	Ordovician	Upper, or Cincinnati Middle, or Champlainian Lower, or Canadian	Invertebrates
	Cambrian	Saratogan Acadian Wancobian	
Primary, or Primitive	Algonkian Archæan		Few Fossils or None

"cores, flakes, flint implements, and stones exhibiting crackling and other evidences of having been subjected to the action of fire." Commenting on this remarkable discovery, Henry Fairfield Osborn says: "It is these flints, discovered by Moir, which firmly establish the existence of Pliocene man in Britain. That this was a working floor is indicated by the presence of flint cores and flint flakes with the flint implements themselves."

Read these quotations again and keep them well in mind.

They prove that man had reached a high state of development, so that he was able to fashion tools and pottery and to use fire, at a time much earlier than when the present soil or upper layer of the earth was laid down, in which the remains of the so-called ape-man have been found. In other words, man was an intellectual being, far ahead of the highest animals (no animal has ever made a tool or built a fire) at a time much earlier than the age in which the people in Professor Osborn's freak-show lived.

Why do the evolutionists say so little about the Calaveras skull found in California? Here was a skull found 150 feet below the surface of the earth without a sign of an inferior race in its form. Dr. Keith, the famous British anthropologist, says: "The skull was not the only evidence of man in the ancient gold-bearing river gravels in Calaveras County. These gravels lie buried under tides of lava which swept the western flanks of the Sierra Nevada in the Miocene and Pliocene periods. There are the most circumstantial accounts of the discovery, in the gravel beds of these ancient Pliocene streams, of stone mortars, stone pestles, hammer stones, spear-heads, etc., not only by miners, but by expert and reliable geologists. Indeed, were such discoveries in accordance with our expectations, if they were in harmony with the theories we have formed regarding the date of man's evolution, no one would ever dream of doubting them, much less of rejecting them. Note that these human remains are found buried underneath lava floods of Pliocene and Miocene (which is still older) date, and that the only reason for discrediting the evidence is that it does not suit evolution." Other worked flints have been obtained in Miocene strata at Otta, in the valley of the Tagus, and at Puy in France. "There is not," says Keith, "a single fact known to me which makes the existence of a human form in the Miocene period an impossibility."

Similarly Prof. Ludwig Hopf admits that stone knives, carved bones, marks of fireplaces, and human skeletons have been found in strata of rock which, according to the geologists, date from a period in which man was represented only by a very remote brute ancestor. Hopf refers to these remains as "clear proof of the existence of Tertiary man." (*The Human Species*, 1909, page 34.)

A genuine pair of human skulls has been found in Santa Barbara, Cal., of late, which, it is claimed, are of immense antiquity, and as they were found in connection with manufactured objects, implements of all kinds, including fish-hooks, they would constitute another instance in line with those just mentioned. It must be remembered that quite a number of skulls have been found in the United States and in South America exhibiting those characteristics which we associate with the early race called after the Neanderthal, where the remains of the first example met with were discovered. Yet experts, after careful examination of these skulls, have so far come to the conclusion that they belong to a relatively modern variety of the Indian type. I have not seen the final findings as to the Santa Barbara skulls.

The discovery of the diuosaur pictograph, which carries back the origin of man as a reasoning creature ten millions of years farther into the past than the Pliocene, is treated in a later chapter.

The Western fossil fields, for a great number of years, have been a great comfort to evolutionists. Have not the Idaho fields produced the bones of fossil horses with three or four toes? And has not the faith of evolutionists been strong enough to accept these creatures as ancestors of the modern horse in spite of the fact that the little four-toed horse is about the size of a tabby-cat?† Has not more

† Another insuperable difficulty attaches to the evolution of the horse. In all the texts on evolution (for instance, in Fiske's *Darwinism*, p. 30 ff.; Edw. Clodd's *Story of Creation*, p. 31; *Encyclopedia Britannica*, Article "Evolution") the development of the horse from a four-toed to a one-toed animal is pictured. It is not generally known, however, that these fossils have been found more than five thousand miles apart, with the Atlantic Ocean between. The early ancestry has been traced from Tertiary deposits of North America while the later forms have been found in Europe. Prof. Geo. B. O'Toole, in his remarkable Macmillan book *The Case Against Evolution*, points out that "it would be absurd to suppose that two independent lines of descent could have ended in producing one and the same type, namely, the one in Europe, the other in far-away America. Neither could the transformists admit that the extinct American horse and the living European horse could have converged from two distinct ancestral origins." So what is to be done to meet the emergency and to keep the current theory on its feet? "Nothing remains, therefore," says our author, "but to hypothesize a Tertiary land-bridge between Europe and North America." Accordingly it is assumed that such a passageway was formed by some remarkable upheaval that saved the hypothesis! Think it over: The little Eohippus, or maybe the Orohippus, the tiny progenitors of the modern horse, creatures about the size of a cat or a fox, traveled from the central part of the United States to the Atlantic coast, then continued across the conveniently constructed Tertiary bridge more than three thousand miles long over to Europe, and there evolved through the ages into the modern draught-horse and the graceful pacer! And yet the evolutionists tell us that the history of Eohippus and his progeny is perhaps the strongest available proof of their theory and places it upon an absolutely scientific basis!

recently, on a Nebraska farm, a tooth been found to which Professor Osborn has bowed himself seven times to the ground, hailing it as the undoubted tooth of the long-sought missing link? But now, as in Byron's poem, a change has come over the aspect of their dream. Evolutionists begin to listen with misgivings to the stories of prehistoric finds that come from the West. The Santa Barbara man lost no less than 17,000 years within one week after he was unearthed. The duck eggs laid in soft pleistocene mud 600,000 years ago have been found to be just balls of clay rolled up by the ocean waves. Dr. George M. Price, the Western geologist, has published highly distasteful facts about layers of rock that lie in the reverse order which they should have according to geology, — that have old fossils on top, young fossils below.

Last year Rev. F. A. Haedicke, of Reno, Nev., wrote me about Mr. John T. Reid, a mining geologist of Lovelock, Nev., and about the imprint which he found of a shoe-sole embedded in an ancient layer of rock. In fact, the rock is of the triassic period, which is about thirty million years older than the layers in which the remains of "ape-men" have been found. Yet this rock bears the obvious imprint of a human shoe, proving that at this early date man had developed far beyond the brutes, so that he was able to fashion clothing. About the classification of the rock, there seems to be no question, since it was declared to be triassic by the United States Geological Survey in 1873. As for the imprint of the shoe, Dr. Alfred W. McCann says that by microscopic examination this has been proved a genuine fossil of "superb perfection." (Dr. McCann in *New York Globe*, March 21, 1922.) Mr. Reid has addressed a personal letter to me, pointing out the technical works in which the age of this particular layer of rock is discussed. At that time Mr. Reid informed me also of a more recent find, that of a complete horse's foot, which he was about to take to New York. Soon the newspapers began to report the astonishing find submitted by Mr. Reid to the New York scientists. The fossil in question represents, to all intents and purposes, a horse such as we to-day know; yet it was found in a layer of stone much older, according to the scientists, than the layer in which the four-toed "horse" has been found! Mr. Reid said to a reporter of the *New York Times*:—

"My theory, greatly strengthened by this fossilized horsefoot, is that the good Lord originally made these things as we see them to-day. Although I was an evolutionist in the beginning, I have changed my view."

From all of which we conclude that there has been no evolution of the horse. Furthermore, the geological ages are becoming more and more doubtful as we hear these conflicting claims of scientists.

When anthropologists summarize their findings concerning the origin of the human race, they are now much more modest in their claims than they used to be. Prof. Wm. Bateson of England says that the doctrine has "developed too fast" and that "a great deal has got to come down." For over half a century the students of plant and animal life have investigated the various clews which would explain man's relation to other living things. As Prof. G. M. Price says: "We are now getting the returns of these investigations. The reports are coming in. And these reports are to the effect that there must be a mistake somewhere, for biologically this theory cannot be true."

One of the most startling books produced in twenty-five years is Oswald Spengler's massive work *Der Untergang des Abendlandes*, published soon after the war and already translated into most modern tongues. The title signifies, "The Decay of the Western World." In Spengler's opinion modern civilization, as we know it, is in a state of decay and is hastening towards complete and utter ruin. One of my correspondents, Rev. F. C. Knief, of Santa Monica, Cal., has found in Spengler's book (Vol. II, p. 35) the following significant statement regarding evolution, which I shall endeavor to translate. Spengler writes:—

"Our notions regarding the history of the earth's crust and of the various forms of life is still controlled by the theory of Lyell and of other Englishmen, who stress a slow development extending over long periods, rather than sudden catastrophes, as taught by the great Leopold von Buch and by Cuvier. The fundamental error of the theory is that it excludes all forms of energy which are not active to-day. There is no more complete refutation of Darwin than the study of fossils. As far as man is concerned, the fossil remains prove that all forms which existed in the past correspond to those living to-day. Not the slightest trace of a development of the race towards higher structure has been found. Man has come as the result of sudden change, of which the Whence, How, and Why will be an unfathomable mystery. Thus the assumption of enormous periods of time for human development is unnecessary. The most ancient beginnings of Egyptian civilization may well fit into the five thousand years of accepted history. The origin of the earth, the beginning of life, the introduction of animated beings, are mysteries which we must accept as such."

Thus speaks a philosopher whom the entire world acclaims as one of the greatest thinkers of the day. Although his sentiments are not Christian, his rejection of Darwinism and of the geological periods is absolute.

Similar revolutionary statements have recently been made by

certain followers of Einstein. If the statements quoted from Spengler are a blow to the pseudoscientific cock-sureness of evolutionists, the results which have been elaborated from the Einstein theory of Relativity must be called staggering. These results mean nothing less than that from the standpoint of the latest philosophical thought the Ptolemaean system (which makes the sun move around the earth) is as valid as the Copernican (which makes the earth move around the sun)! A. Sommerfeldt writes in *Sueddeutsche Monatshefte* (Vol. 18, 1921, No. 2) concerning the effect of Einstein's theory on astronomy as follows:—

"Hereafter none must be prohibited from saying: The earth



Has this evolved



from this?

Has the form and hand and brain of Raphael been evolved from the form and hand and brain of the gorilla? Evolutionism says, Yes; the Bible, true science, and common sense say, No.

is stationary, and the firmament revolves around the earth, or: The sun moves, and the earth stands in a focus of its orbit. According to Einstein's theory a firmament revolving around a stationary earth develops the same centrifugal forces in the earth that according to Newton are developing in a revolving earth, and this has been demonstrated mathematically by Thirring. It will always be more convenient, and for the purpose of astronomical computation more practical, to work from the basis of the Copernican system. But it is not unreasonable to accept the Ptolemaean. Indeed, the theory of Relativity has been able to make its conquest just because it has shifted its standpoint regarding this question."

In *Unsere Welt* (1920, No. 3) Doctor H. Remy discusses "The Physical Principle of Relativity" and says: "From this point of view the usual conflict between the Copernican and Ptolemaean systems finds its definite solution. We cannot deny that it is senseless to call one of these systems the only correct one and to designate the other as being false."

It seems as if the world do move.

There is in all the museums of the world and in the laboratories of all universities nothing that has proved untrue the words of Scripture when it speaks of the origin of visible creation.

It is as true to-day as when first written in 1 Cor. 15, 30: "All flesh is not the same flesh; but there is one kind of flesh of men, another flesh of beasts, another of fishes, and another of birds,"—ever separate and distinct, even to the point where a chemist can now tell from what particular order of "flesh" a drop of blood has come.

"Through faith we understand that the worlds were framed by the word of God, so that things which are seen were not made of things which do appear." Heb. 11, 3.

"And He answered and said unto them, Have ye not read that He which made them at the beginning made them male and female?" Matt. 19, 4; Mark 10, 6.

"In six days the Lord made heaven and earth, the sea, and all that in them is, and rested the seventh day; wherefore the Lord blessed the seventh day and hallowed it." Ex. 20, 11.

8. Evolution of Man — the Verdict of History.

Ask ten Americans what idea they connect with "progress," and nine of them will answer "machinery." When we point to American progress, we think of oil-burning locomotives, submarines, the aeroplane, the radio, the phonograph, moving pictures, the telephone, the typewriter, the adding-machine, the addressograph, check protectors, and fountain pens—all machinery, or the product of, and made possible by, machinery. That modern times have scored an advance on ancient times in the mechanical arts may be admitted. Yet for that reason to speak of a steady progress of human evolution would be a statement possible only if we take a very contracted view of progress.

Even as regards the mechanical arts, is it true that great achievements are scored only in modern times? Every modern builder stands in mute amazement before the pyramids of Egypt. Consider that the huge granite blocks of which the pyramids are built were

transported 500 miles. By what knowledge of mechanics was this task made possible? Who gave the Egyptians the knowledge and skill to polish these granite blocks like glass and to fit them so that the joints cannot be seen? You know that the pyramids, in spite of their weight of millions of tons, have not settled in any part to the extent of a measurable fraction of an inch. Mr. Ferguson, possibly the greatest living authority on architecture, writes: "Nothing more perfect, mechanically, has ever been erected since that time, and we ask ourselves in vain how long it must have taken before men acquired such experience and such skill or were so perfectly organized as to contemplate and complete such undertakings."

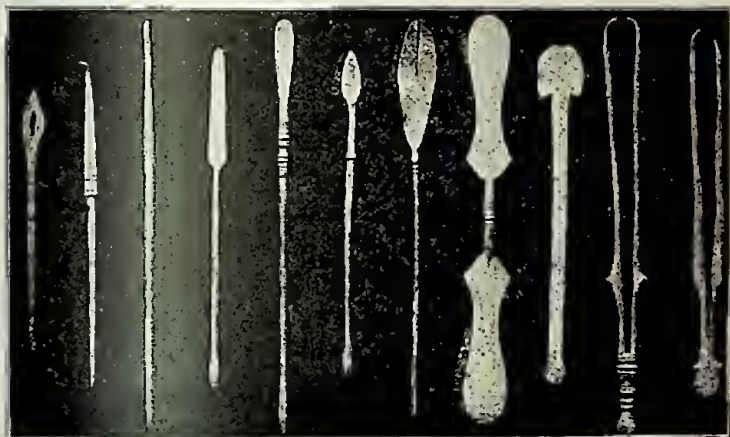
On turning to his pages describing the buildings at Thebes, erected three thousand years ago, we find that these early Egyptian builders in the palace temple at Karnac put forth "perhaps the noblest effort of architectural magnificence ever produced by the hand of man," "the greatest of man's architectural works." This was in the days before Moses! And the average person thinks that the epoch of his buildings commences with the Masonic Temple at Chicago! "The farther we go back in Egyptian history," says Professor Brugsch, "the more perfect their works of painting and sculpture"; and Professor Renouf says: "Of a state of barbarism or even of patriarchal life anterior to the monumental period there is no historical vestige. The earliest monuments which have been discovered present to us the very same fully developed civilization and the same religion as the later monuments. The blocks of the pyramids bear quarry marks exhibiting the decimal notation and are dated by the months of the calendar which was in use down to the latest times."

In the Cairo Museum is a collection from Memphis which surpasses in interest anything of the kind previously found. It is a collection of modeled heads, now one hundred and thirty-two in number, representing the different races and tribes of men and women in that ancient world. All are characterized by that remarkable development of the cartoonist's skill, so peculiarly Egyptian, which enabled artists of that land to catch in each case that personal peculiarity which distinguished one person or people from another. When these heads are all identified and published by some competent artist, we may have our Bible and ancient history illuminated with "the races of men" in much the same fashion as the school geography. The statues and plaques carved in stone and wood to be seen in the Gizeh Museum prove that the priest mummifiers of Memphis four thousand years ago possessed a profound knowledge of anatomy. Science, therefore, as Lockyer remarks, is as old as art, and they have advanced together. Another remarkable fact in this connection is

that excavations in Italy have brought to light scores of finely finished surgical instruments for certain operations, which are in almost every particular of form like some reinvented in modern times and used by the most advanced surgeons of to-day.

"We are losing all our secrets in this shabby age," an architect recently said. "If we keep on, the time will come when we shall be able to do nothing well.

"Take, for instance, steel. We claim to make good steel, yet the blades the Saracens turned out hundreds of years ago would cut one of our own blades in two like butter.



Surgical Instruments Used by Roman Physicians Two Thousand Years Ago.

These instruments, exhibited in the Field Museum, Chicago, are as perfect as any of the same type in use to-day and point to high development of surgical science in the days of the Roman Empire.

"Take ink. Our modern ink fades in five or ten years to rust color; yet the ink of medieval manuscripts is as black and bright to-day as it was seven hundred years ago.

"Take dyes. The beautiful blues and reds and greens of antique Oriental rugs have all been lost, while in Egyptian tombs we find fabrics dyed thousands of years ago that remain to-day brighter and purer in hue than any of our modern fabrics.

"Take my specialty, buildings. We can't build as the ancients did. The secret of their mortar and cement is lost to us. Their mortar and cement were actually harder and more durable than the stones they bound together, whereas ours—horrors!"

Turning to America, we find that Dr. Hiram Bingham, assistant professor of Latin American history in Yale University, who in 1912 visited Peru, declares that the oldest remains of Peruvian civilization are the most perfect. He writes: "The pre-Inca remains are much more interesting and denote a higher condition of civilization than the Inca relics. No marble could be more exquisitely cut. We learned that the workmanship of these pre-Inca peoples, preceding those whom Pizarro conquered, exceeded in beauty the work of the Incas of Pizarro's time."

So wherever we turn in the world's history, we find, not progress from savage beginnings, but degeneration from an earlier perfection.

No one should be misled by the common talk about the stone, bronze, and iron ages as if the history of mankind could be arranged in such an ascending order. We have all these "ages" in existence somewhere in the world to-day. Strangely enough, the explorers of Asia Minor found that the bronze age was before the stone age. And America had the stone age when Europe had the metal age.

As to savage races, these are the very opposite of evolution. They are races in ruins. The degeneration of the Akkas of Guinea, of the Bushmen of South Africa, of the Australian Negroes and the Fire Islanders is very great; but these barbarian races, representing hundreds of thousands of human creatures, millions of them, are a proof of terrible *decay*. Without Christianity no race has ever been observed to rise from savagery to culture.

There is a distinct tendency towards greater care in the use of such words as "primitive" with reference to savage tribes. Bulletin No. 63 of the Bureau of American Ethnology, Smithsonian Institution, Washington, published in 1917, contains an argument against the evolutionistic view based upon studies of the Indians which inhabit Tierra del Fuego, an island near the southern tip of South America. It had been contended by leading evolutionists that the aborigines of Tierra del Fuego possessed no ideas of religion, and therefore religion represented only the result of human evolution. More recent research has strengthened the position of the writers in the *Smithsonian Bulletin*. It has now been proved absolutely that the natives of the Fire Island not only have a religion, but have a system of ceremonies by which the young men and women of the tribes are introduced to a knowledge of "relatively high moral standards." Indeed, these natives "have a distinct and persistent idea of God," who is described as all-seeing and omnipresent and who is greater than all other gods. The earlier impressions of Europeans who visited these "primitive" men are proved to have been based upon fallacies and ignorance.

Savages do not always progress toward civilization. There are

savages in the world to-day; as far backward as history gives us a view of the matter there have been savages. Some of these in contact with civilized Christian people have progressed toward civilization. On the other hand, some, the descendants of the most



Gone Down or Going Up?

Evolution says that all human beings were once in a savage state like this African warrior. A study of history, however, proves that the savages are humanity in a state of decay. Looking at the picture, we must say: "Man has come down to this" rather than: "From this we have evolved."

civilized, have retrogressed toward the savage state. Instances of this have occurred even among our own American people; the less energetic and less "prosperous" out of some of our best families, drifting into mountains and other less populated and less fertile sections, have left descendants approximately savages. So far as

history and archeology can tell, we know absolutely nothing of the first savages. Canon Rawlinson says in *The Origin of Nations* (pp. 4, 5) :—

"Herodotus (IV, 108) tells us of the Geloni, a Greek people, who, having been expelled from the cities on the northern coast of the Euxine, had retired into the interior and there lived in wooden huts and spoke a language 'half Greek, half Scythian.' By the time of Mela this people had become completely barbarous and used the skins of those slain by them in battle as coverings for themselves and their horses. A gradual degradation of the Greco-Bactrian people is apparent in the series of their coins which is extant."

The modern Copts are very degraded descendants of the ancient Egyptians, and the Romans of Wallachia have fallen away very considerably from the level of the Dacian colonists of Trajan. Civilization, as is evident from these and various other instances, is liable to decay, to wane, to deteriorate, to proceed from bad to worse, and in course of time to sink to so low a level that the question occurs, "Is it civilization any longer?"

Where we find a real history of a people, — and such histories we have of civilized peoples, — we find clear indications of a Golden Age. It is Eden as told in Genesis. A similar history comes to us from the early times of the Persian race, as told in the *Vendidad*. Hesiod sang the story of the beginning of history for the Greeks, and it began with a Golden Age. The Chinese point backward to their early ancestral age as a sort of "first heaven." Prescott found well-matured legends of a Golden Age in Mexico and of a paradise for the ancient Peruvians on Titicaca's shores.

We hear of ruined cities in Yucatan and New Mexico that indicate an age of civilization for each of these lands far back of the savage conditions found in them by white men, and vastly superior. The aboriginal earthworks scattered over sections of our own Southland tell certainly of a civilization exceeding and antedating the best our fathers found among the Choctaws, Cherokees, and Chickasaws.

In the *Lutheran Church Work and Observer* of January 9, 1919, an editorial appeared under the caption, "What About Evolution Here?" The following is pertinent to the present discussion :—

"A very illuminating article by Dr. L. T. Townsend appears in the December number of the *Bible Champion*. Its title is, 'Pre-historic Peoples of the Western Continent.' Dr. Townsend's contention is that the high civilization indicated by the ancient cities exhumed in Mexico, Yucatan, and Central America, compared with the present inferior civilization of many of the people in the same regions at present, is absolute proof against the theory of evolution,

whatever adjectives may be put before the term. Let us quote in proof of this position:—

“Of the wonderful prehistoric cities of Mexico much has been written, but none too much. Where once were cities having a hundred thousand or more inhabitants, adorned with parks, palaces, and temples, are now to be seen the outlines only of deserted streets and ruins of palaces that had been built and were in ruins long before the Aztecs and Toltecs had settled in the country. In Yucatan alone there are ruins that were once large and flourishing, where now silence reigns; and noblemen who lived in royal palaces have given way to half-clothed and half-fed peons living in adobe huts.’

“It might almost be said, using a colloquialism, that evolution was not ‘on its job’ in those countries. If there was evolution of any kind, it was obviously evolution downward. This is the question we should like to ask: If evolution is the outstanding and dominant principle in the world, why is its working not more strikingly displayed both in the past and in the present? There is not one scintilla of evidence that animistic and polytheistic peoples have ever risen into monotheism by means of purely ‘resident forces.’ When such degenerate people *have* been lifted to a higher level morally and religiously, it has always been because they have been touched and uplifted by forces outside of themselves; and in every such case it has been the Bible and Christianity that have thus lifted them out of their pitiful condition. But that is not evolution; it is the adding of a supernatural force. In the world of nature and of man there is the most tangible and striking evidence of the operation of two principles: one is a ceaseless round without progress; the other is degeneration. The proof of progressive evolution by means of merely resident forces is conspicuous for its absence.

“Dr. Townsend speaks by the book of the status of affairs in the countries named; for he has himself been on the ground, has personally examined the ruins, and has made extensive collections of relics from the marvelous ancient cities, which furnish indubitable evidence of a high civilization in a remote antiquity. In view of these things it is useless for certain classes of would-be scientists to continue to go along in smug assurance that their evolutionary theory has been proved, and that no more is to be said. That is conservatism gone to seed; it is not science, which always has its mind open to truth and reality.”

Mr. McCaun very properly asks: “Why do the Haeckelites of this generation resort to a rowboat load of mutilated skull-caps, fragments of thigh-bones and grossly defective skeletal remnants to support their theory of an ascending evolution from the ape when here, now, alive in the world, they find countless millions of over-

whelming proofs of universal *degeneration* from the ideal primitive described in the word: 'And God created man in His own image; in the image of God created He him'?"

Where to-day is the Hindu race that could build the Taj Mahal?

Dr. Patterson asks: "What Greek race to-day could reproduce the architecture or statuary of their ancestors? The ruins of all Eastern and many Western lands point to fallen races as well as ruined structures. The world's history is that of the fall of great nations, such as Egypt, Babylonia, Greece, Rome, in all of which are sad examples of architecture and peoples alike in decay."

What overwhelming proof of decay of human intelligence is told in the lecture of Wendell Phillips, "The Lost Arts"! Consider the marvels of the engineer's art as told by Phillips: "You may visit Dr. Abbot's museum, where you will see the ring of Chcops, the pyramid builder. The signet of the ring is about the size of a quarter of a dollar, and the engraving is invisible without the aid of a glass. No man was ever shown into the cabinets of gems in Italy without being furnished with a microscope to look at them. It would be idle for him to look at them without one. He couldn't appreciate the delicate lines and the expression of the faces. If you go to Parma, they will show you a gem once worn on the finger of Michelangelo, of which the engraving is two thousand years old, on which there are the figures of seven women. You must have the aid of a glass in order to distinguish the forms at all. . . . Layard says he would be unable to read the engravings at Nineveh without strong spectacles; they are so extremely small. Rawlinson brought home a stone about twenty inches long and ten wide, containing an entire treatise on mathematics. It would be perfectly illegible without glasses. Now, if we are unable to read it without the aid of glasses, you may suppose the man who engraved it had pretty strong spectacles. So the microscope, instead of dating from our time, finds its brothers in the Books of Moses."

As a matter of fact, evolutionists admit that there has been no change whatever in the human race during the past thirty thousand years. As Dr. Sayce says: "The whole application of a supposed law of evolution to the history of the ancient Oriental world is founded on what we now know to have been a huge mistake. The Mosaic age, instead of coming at the dawn of ancient Oriental culture, really belongs to the evening of its decay. The Hebrew legislator was surrounded on all sides by the influences of a decadent civilization."

And so we might proceed indefinitely, showing that the first and oldest Gothic cathedrals, those at Amiens and Rouen, were never surpassed; that no epic poetry has ever been written that surpassed the earliest epic poems, those of Homer. Conversely, the Koran, or

Bible of the Mohammedans, is centuries later than the New Testament, hence ought to be a great improvement on it, and the Book of Mormon on the Koran, and Mrs. Mary Baker Patterson Eddy Frye's text-book of Christian Science a vast improvement again on the Book of Mormon. As a matter of fact there is so great a deterioration in these manufactured religions that one might aptly say that even the devil is degenerating.

How, in view of the degeneration observable in human history, serious students can still maintain that there is evidence of an evolution from lower to higher forms of civilization, under natural law, passes comprehension. There can be no statement more directly opposed to the facts of history than the claim of Professor Conklin of Princeton, who says that "everything goes to show that evolution has always been progressive." Everything goes to show the very opposite.

9. "How Old Is Man?"

The antiquity of man is discussed in an article contributed by Theodore Roosevelt to the *National Geographic Magazine*.¹⁾ The article purports to give a brief summary of that which has been ascertained by anthropological science in answer to the question, "How old is man?" and by reason of the distinguished name of its author has received wide attention. Mr. Roosevelt intends to trace the prehistory of man, "the history of his development from an ape-like creature struggling with his fellow-brutes." He refers to a past geologic age, when "man was slowly developing from the half-human to the wholly human," "from a strong and cunning brute into a man having dominion over all brutes, and kinship with worlds lying outside and beyond our own," and intends to summarize "all that has been discovered and soundly determined" since Darwin wrote his *Descent of Man*. Mr. Roosevelt refers with undisguised disdain to those who once "disbelieved in the antiquity of man," and his article leaves no doubt in the reader's mind that in the opinion of Mr. Roosevelt this disbelief in the evolutionistic thesis concerning the origin and ancestry of man has been amply proved unfounded by the facts. His assertions are made with a calm emphasis, which cannot fail to impress the unsophisticated reader. We are invited to consider "man as he was up to the end of palcolithic times." "The records show that man has lived in France for at least 100,000 years."

The illustrations which accompany the article add to the impression that the question, "How old is man?" may now be answered

1) February, 1916: "How Old Is Man?"

with the testimony of well-established scientific proof; for have we not here the "Ape-man of Java, a Prehuman Creature, Who Lived Probably 500,000 Years Ago"? Have we not a head reconstructed on the Piltdown Skull? Do we not observe the trend towards the human in the reconstructed Neanderthal Man on page 120? Does not a half-tone on page 124 show this same Neanderthal Man chipping a piece of flint into arrow-heads, and the Cro-Magnon Man in the act of drawing a bison on the wall of his cave? The unavoidable impression is conveyed that we are moving along lines well established by scientific research, and that it is no longer "necessary to argue with those who disbelieve the antiquity of man." It is with this latter presumption that we intend to deal in our discussion of Mr. Roosevelt's article. Frankly, *we disbelieve* the antiquity of man, and it is our purpose to show that Mr. Roosevelt has, in his discussion of the question, "How old is man?" introduced no facts which have caused us to waver in our adherence to the record in Genesis, and, furthermore, that the distinguished contributor to the *National Geographic Magazine* has withheld from his readers certain facts, which, if presented, would have materially depressed the interest of the public in his conclusions.

Mr. Roosevelt's article is, in substance, a *résumé* of Mr. Henry F. Osborn's book *Men of the Old Stone Age*, which, in his opinion, sums up the assured results of research and constitutes the unanimous consensus of scholarship. Is Mr. Roosevelt right in both these assumptions? Only when the question is approached: Whence did these various forms of ape-man originate, and how are they related to one another and to recent man? does the author caution his readers that here Mr. Osborn "states his conclusions as strong probabilities, not certainties." But this closing paragraph of Mr. Roosevelt's article serves the purpose of deepening the impression that all that has been said about the nature and antiquity of the fossil remains in the preceding paragraphs is based upon the unquestioned and unanimous agreement of scholarship. Again we ask, Is Mr. Roosevelt justified in this initial assumption? The question can best be answered by taking up seriatim the evidence adduced for the evolutionistic view of human origins.

Pithecanthropus Erectus.

Pithecanthropus Erectus is the name invented by Haeckel for the "missing link" and given by Dr. Eugene Du Bois, a Dutch physician, to certain remains discovered by him on the island of Java in 1891. The remains consist of "an imperfect cranium, a femur bearing evidence of prolonged disease, and a molar tooth." (Dana, *Manual of Geology*, p. 1036.) The discoverer of these bones

asserts that he found them in Pleistocene deposits, and believes that they are the remains of a being between the man-apes and man. Prof. Virchow and other specialists in anatomy examined this find. It was established that the femur was found a year after the cranium. The *Encyclopedia Britannica* (Vol. XXII, p. 336) describes the skull as follows: "The forehead is extremely low, with beetling brow-ridges, and the whole calvarium presents a curiously gibbon-like aspect." Some regard the remains as belonging to a low-grade man or to an idiot. (Dana, *l. c.*) The cubic measurement of the skull is 60 cubic inches, about that of an idiot, that of a normal man being 90 cubic inches and that of an ape 30. These specimens were found in separate places. The skull is too small for the thigh-bone. The age of the strata in which they were found is uncertain. The assumptions on which the claims made for these bones are based are the following: First, that they are as old as claimed, 100,000 years at least, or a million, as stated by some. Secondly, that these bones belong to the same individual. Thirdly, that they are the remains of a full-grown individual. Fourthly, that they are the remains of a human or semihuman being. An authority of the first rank, Prof. Klaatsch, of Heidelberg University, says that the *savants* may be right in inferring from the fragmental Javan remains that they belong either to the most manlike of apes or the most apelike of men, but that the creature does *not* supply the missing link in a pedigree beginning in a simian and ending in *homo sapiens*.

Upon such a floating foundation of scientific surmise Mr. Roosevelt presumes to build a very substantial structure. He says: After the prehuman days of man, probably branching off from the stem of the anthropoid apes, comes "the famous ape-man of Java, the pithecanthropus, the prehuman creature,—probably, however, only collaterally in our line of ancestry,—who appeared at the dawn of the Pleistocene. This being was already half-way upward from the beast, half-way between true man and those Miocene ancestors of his who were still on the psychic and intellectual level of their diverging kinsfolk, the anthropoid apes. He, or some creature like him, was in our own line of ascent during the uncounted ages when our ancestors were already different from all other brutes and yet had not grown to be really men. He probably used a stone or club at need and about this time may have begun very rudely to chip or otherwise fashion stones to his use." All this detail concerning the pithecanthropus from its Miocene "ancestors" to its rudely fashioned tools is purely the product of imagination, starting from three or four broken bones and the evolutionary theory. We have not seen Mr. Osborn's book, upon which Mr. Roosevelt relies for his facts. Possibly it treats the pithecanthropus as an ancestor in the direct line

of the descent of man. If it does, the author stands alone among modern scientists, who are substantially agreed with Dr. Klaatsch that the being of which Du Bois discovered the remains is not "probably," but most certainly, outside the direct line of human descent. These bones, then, have no place in a discussion of the question, "How old is man?"²⁾

The Piltdown Skull.

"After the ape-man of Java," continues Mr. Roosevelt, "we skip a quarter of a million years or so — according to Mr. Osborn's conservative figuring — before we get our next glimpse of a near-human



(c) Am. Museum of Nat'l History

The Restored Skull of the "Java Ape Man."

The black portion of this and the other "skull" on this page is said to denote the part that was originally found. The rest is the sculptor's imagination, and the whole thing is one of the "scientific" hoaxes of the present day. Question: Where are these Du Bois bones, and why are they kept from every possible inspection?



(c) Am. Museum of Nat'l History

The Piltdown "Skull."

To show that this was the "missing link," this skull-bone was built up with a brain-chamber of 1,070 cubic centimeters, half-way between man and monkey. Dr. Edward Keith, English anatomical expert, found, however, that the brain capacity must have been at least 50 per cent. larger, so that the Piltdown Man had a larger brain-chamber than the average man to-day.

predecessor of ours. This is the Heidelberg Man, who lived in the warm second interglacial period, surrounded by a fauna of huge and fearsome beasts, which included the saber-tooth and the hippopotamus, etc. He was a chinless being, whose jaw was still so

2) To build upon such slight evidence a theory of human descent is hazardous also in view of the fact that the evidence of bones and other remains is now generally suspected. It has been found that even in the case of recent remains, as in criminal trials, experts are often unable to decide whether they are human or brute, recent or remote, and what part of the frame they occupied.

primitive that it must have made his speech imperfect; and he was so much lower than any existing savage as to be at least specifically distinct; that is, he can be called 'human' only if the word is used with a certain largeness. Again we make a long skip, this time of somewhat over a hundred thousand years, and come to the Piltdown Man, or near-man—a being seemingly little more advanced than the man of Heidelberg, and in some ways less so, for he possessed apelike canine teeth." In a hürst of confidence the author then admits that there is room for "considerable difference of opinion" regarding the age of these "very early near-human remains" and their exact relation to the human race; yet this admission, if anything, deepens the impression that as to the near-human characteristics of all these remains and their significance as evidence of hrute ancestorship of man there can be no manner of doubt. What are the facts?

Mr. Roosevelt, on page 119, shows a reproduction of the Piltdown Man, "believed to have lived in England and France 100,000 to 300,000 years ago." The wide disparity of these estimates of antiquity should in themselves bid one pause before one accepts the very unprepossessing creature depicted here as an ancestor of man. Our faith in this reconstruction is yet more rudely shaken when the testimony of Dr. Arthur Keith, the anatomical expert of the Royal College of Surgeons of England, is heard. It is true that Dr. Smith Woodward and Dr. Charles Dawson, in reconstructing a man from the Piltdown³⁾ skull, built up something essentially monkey-like, with receding forehead, projecting brows, and a gorilla-like lower jaw. Professor Keith, checking up on this reconstruction, comes to an entirely different conclusion. He finds that the work of Drs. Dawson and Woodward was done in open defiance of all that the scieatists know about skulls, whether ancient or modern. He writes:—

"That the Piltdown find is the most important discovery of its kind ever made will be freely granted by all who have inquired into man's ancient history.

"Nothing can detract from the debt which we owe to Charles Dawson and Dr. Smith Woodward on this score. It was natural that they should be influenced by the beliefs of the time. The evidence as regards antiquity of the Piltdown race pointed, in their opinions, to a very early phase of the Pleistocene period. It was the date at which man should still be struggling toward a human form, if the accepted opinion was well founded.

"In the chin region of the lower jaw of the Piltdown skull the discoverers found that the characters were absolutely apelike, abso-

3) Discovered in 1912 on Piltdown Common, near Ucksfeld, Sussex, England.

lutely unhuman. The characters of the chin dominated their work when they came to fit the parts of the skull together; so certain were they that they had found a real intermediate stage between ape and man that they abandoned all the precepts of the ordinary anatomist. It was recognized that all the parts of the skull, barring their massive thickness, had the same characters as modern man, only the chin was different. In the skull, eventually reconstructed, representing the form of man's head in the early Pleistocene, one could recognize a mixture of features, recalling a microcephalic idiot's skull on the one hand and a chimpanzee's on the other.

"This hybrid skull was received with open arms by the orthodox anthropologists. They were comforted to know that their beliefs had been well founded, even if their early-Pleistocene ancestors proved to be but half an ape. As for myself, it was necessary to examine again my facts, inferences, and beliefs, and see how they could be fitted to meet the evidence yielded by Piltdown; for at first I accepted implicitly the skull reconstructed.

"Until Mr. Dawson's discovery I was certain we had followed the modern man back beyond the middle of the Pleistocene, and on other evidence had postulated that long before the dawn of the Pleistocene period it would be found that man had attained a full-sized brain. There were also the important discoveries of Benjamin Harrison and J. Reid Moir. They had found flints which had been shaped by the hand of man before the middle of the Pliocene period.

"Matters had reached this stage when I returned from a glorious golfing holiday in Cornwall early in the summer of the present year. On my return I found waiting me excellent casts of the various fragments of the Piltdown skull, which had been prepared by F. O. Barlow. Sitting down to mark out these Piltdown fragments on a modern skull in order that visitors to the museum of the Royal College of Surgeons might quickly perceive how they differed from the corresponding parts of modern man; I was surprised to find that the area of the ancient parts was much larger than their modern representatives. I also observed that the squamosal — the bone which forms the side of the skull between the ear and the forehead — was much larger than in modern skulls.

"That was altogether unexpected, as in all ancient skulls, especially skulls of the Neanderthal race, this bone is particularly small. My curiosity was aroused. I soon saw that the parts of the reconstructed Piltdown skull had been apposed in a manner which was in open defiance of all that was known of skulls ancient and modern, human and anthropoid. Articulating the bones in a manner which has been accepted by all anatomists in all times, I found that the brain-chamber, instead of measuring 1,070 cubic cm., as in Dr. Smith

Woodward's reconstruction, measured 1,500 cubic cm.—a large brain-chamber for even modern man.

"Comparing the impressions left by the convolutions of the brain on the Piltdown skull with those on a modern skull, I found a close correspondence. It was then apparent a very great mistake had been made; the ancient 'man of Piltdown *had a brain as big as modern man.*"

Until the controversy has been settled by the scientists now at loggerheads over the Piltdown skull, no one should pass off one of the several "reconstructions" of the Piltdown Man with an air of scientific finality, as was done by Mr. Roosevelt in the *National Geographic Magazine*. An honest presentation of the facts would not have ignored the wide divergency in the opinions of Drs. Woodward and Dawson, and Dr. Keith, and the controversy which the disagreement of these leaders has called forth. The statement that there is "room for considerable difference of opinion" as to the age of these specimens and their relation to human ancestry does not touch the matter which concerns us here. The impression is left by Mr. Roosevelt's article that, whatever the age of these fossils, and whatever their relationship to our race, the reconstructions based upon them,—with "primitive jaw," "chinless being," "lower than any existing savage," etc., —are the unquestioned result of scientific research. *They are not.* Until the leading authorities have settled their dispute concerning the appearance of the man of Piltdown, that specimen must be ruled out, even on scientific grounds, as evidence pointing to the descent of man from animal ancestors.

The Neanderthal Man.

Mr. Roosevelt discusses the Neanderthal Man, next in line of "prehuman predecessors of ours," with a wealth of detail which argues close acquaintanceship. He writes: "These Neanderthal men were squat, burly, thick-skulled savages, with brows projecting over cavernous eyes, knees permanently bent, and jaws almost chinless. Their brains were of good size, but the portions which represented the higher intellectual attainments were poorly developed. . . . They were a low race of men, distinctly human, but far nearer the beast than any existing race." More detail is added regarding the fashioning of tools, their hunting-grounds, and cavern-life. Again we ask, What basis of fact underlies these confident assertions?

The Neanderthal skull was found in 1856, in the neighborhood of Duesseldorf, by Dr. Fuhlrott, of Elberfeld. When the skull and other parts of the skeleton were exhibited at a scientific meeting held at Bonn the same year, a wide divergence of opinion at once developed among the specialists. By some, doubts were expressed as

to the human character of the remains. Others held that the remains indicated a person of much the same stature as a European of the present day, but with such an unusual thickness in some of them as betokened a being of very extraordinary strength. Dr. Meyer, of Bonn, regarded the skull as the remains of a Cossack killed in 1814! Other scientists agreed with him. Modern Science accepts the antiquity of the Neanderthal Man, but the controversy has never ceased. Mr. Roosevelt admits that Darwin practically ignored this discovery, "though it was exactly the 'missing link' he hoped to find." The great Virehow declared the peculiarities of the bones to be the result of disease. Mr. Roosevelt chides Virehow for his "wrong-headed insistence, which delayed for a full generation the full understanding of its importance." However, when, following Osborn, Mr. Roosevelt terms the Neanderthal race "distinctly human," "human beings" (p. 125), he is not supported by Schwalbe, who in his standard work on the subject (*Der Neanderthalschaedel*, 1901) says that this species, though extremely ancient, is "distinctly not human" — "ist ausserhalb der Variationsbreite des Menschen,⁴⁾ weil er eine grossere Anzahl von Merkmalen aufweist, die keine der ausgestorbenen oder jetzt lebenden Rassen des *Homo sapiens* besitzen. *Er ist eine besondere Art,*" a distinct, independent species. In the article "Mensch" in Meyer's *Konversationslexikon* the man of Neanderthal and Krapina (referred to hereafter) is called a type quite divergent from recent man — "ein Typus, der von dem rezenten Menschen durchaus abweicht." An authority on organic evolution, Professor Cope, thinks that the Neanderthal specimens are *specifically* different from *Homo sapiens*, because the Neanderthal skull "has a smaller brain-cavity, a retreating forehead, and also a retreating chin." He thinks the Pithecanthropus of Du Bois "may go with *Homo Neanderthalensis*, though its chin is not known."⁵⁾ Here it should be stated that an entire group of scientists believes, on the evidence of the Piltdown skull, that the prehistoric race from which we are descended never became so bestial as the possessors of the skulls found at Neanderthal, at Spy in Belgium, and La Chapelle-aux-Saints in France are believed to have been, and that the latter

4) "Beyond the range of the variability of the human type."

5) In other words, Mr. Cope, unquestionably a man competent to speak on matters concerning speculative science, believes that the Pithecanthropus and the Neanderthal Man might well have been coeval. According to Mr. Roosevelt's authorities, they were separated by a chasm of at least 350,000 years, "conservatively figured." How may any one speak with such assurance as Mr. Roosevelt when leading theorizers are so far apart in their estimates? (See Cope, *The Primary Factors of Organic Evolution*, Open Court Publishing Co., 1896.)

belonged to a branch of the race which gradually degenerated, until it finally became extinct, while the other and superior branch kept on improving until man as we know him gradually developed.

However, the "bestial" character of the Neanderthal remains is by no means admitted on every hand. Near Liège, in Belgium, not more than seventy miles from the Neanderthal, the Engis skull was found. After careful measurements it was proved not to differ materially from skulls of modern Europeans. This fact should prevent us from making any assertions respecting the primitive character, in race or physical conformation, of these cave-dwellers. Indeed, Professor Huxley, in a very careful and elaborate paper upon the Neanderthal and Engis skulls, places an average skull of a modern native of Australia about half-way between those of the Neanderthal and Engis caves. Yes, he says that, after going through a large collection of Australian skulls, he "found it possible to select from these crania two (connected by all sorts of intermediate gradations), the one of which should very nearly resemble the Engis skull, while the other would somewhat less closely approximate to the Neanderthal skull in size, form, and proportions." And yet, as regards blood, customs, or language, the natives of Southern and Western Australia are probably as pure as any race of savages in existence. In fact, it would, no doubt, be possible to find in Europe or America among persons of abnormal underdevelopment, such as idiots, skulls of a formation which would match that of the Neanderthal.⁶⁾ "The Engis skull, perhaps the oldest known, is," according to Professor Huxley, "a fair average skull, which might have belonged to a philosopher, or might have contained the thoughtless brain of a savage." In this opinion Mr. Huxley is supported by one of the greatest anthropologists of his time, Daniel G. Brinton, who says concerning the cave-men of France and Belgium: "Neither in stature, cranial capacity, nor in muscular development did these earliest members of the species differ more from those now living than do these among themselves. We have no grounds for assigning to these earliest known men an inferior brain or a lower intelligence than is seen among various savage tribes still in existence."⁷⁾

Confusion has become worse confounded since Professor Gorjanovic-Kramberger, of Agram, found the remains of ten prehistoric individuals in Krapina cave in Croatia, Austria. Professors Schwalbe and Klaatsch produced facts which "prove positively" that the Krapina skull is of a type much lower than the lowest human skull of to-day and represents a creature separated from the man of to-day

6) Keary, *The Dawn of History*, p. 8.

7) *Universal Encyclopedia*, VII, p. 470.

by a far greater difference than was the difference between him and the ape. Dr. Hagen writes: "Our organs of speech, particularly the tongue, are governed by a group of muscles which are fastened to a little double-pointed growth of bone on the inside of the chin. In the anthropoid ape, who lacks the power of articulate speech, we find a *groove* in that place instead of a growth of bone. That same groove we find in the man of Krapina." But there is still a difference of opinion concerning several very important points. The Belgian scientist Fraipont believed that the Krapina skeletons showed that this man could not walk upright, or at least did not walk upright habitually. Other scientists say that the study of the bones does not justify this opinion. The teeth of the skulls found at Krapina are of immense size, greater even than those of the ape, and in some respects differing from the dentition of modern man. These divergencies have convinced the scientists that, whatever the age of the Krapina specimens, *they do not constitute the "missing link" between the brutes and man.* "Their facial features were certainly animal-like, being even behind the ape in the absence of forehead and chin. The conclusion that this creature was not merely different from recent man in kind, but actually different in species, is unescapable."

Has the Missing Link been Found?

In all this we note a truly formidable conflict of first-class authorities. Mr. Osborn, whom Mr. Roosevelt follows, pronounces the Neanderthal Man "distinctly human," "human beings." Schwalbe, the greatest specialist in this field of research, says: "This species is distinctly outside the field of human variability; it is essentially a distinct species." In this, Schwalbe has the support of the professional evolutionist Cope. Yet Cope would have the Neanderthal Man go with Pithecanthropus, whom Roosevelt makes 350,000 years ("conservatively figured") older than the Neanderthaler. Others hold that the latter is a degenerate type of man. Huxley says it resembles the skull of some Australians in size, form, and proportions, and in this he is supported by Brinton. Others again classify the Neanderthal remains with the Krapina specimens, which, however, differ in the immensely important factor of dentition from modern man, and must, "by unescapable conclusion," be regarded specimens of a creature radically different from recent man. How, in view of this clashing of opinions, can Mr. Roosevelt say that he is presenting a summary "of all that has been discovered and soundly determined"? He calls the Neanderthal Man the "missing link." "Not our ancestor," "savages lower than any existing human type,"⁸⁾

8) This in flat contradiction to the opinion of Huxley and Brinton, above quoted.

yet "exactly the missing link which Darwin hoped to find" (p. 125). How does this square with contemporary scientific opinion? No one can read Mr. Roosevelt's article and escape the impression that not only one, but many missing links have been found. There is an outline of development from the Pithecanthropus through Pildown and Neanderthal to the ancestors of *Homo sapiens*. Let us ask: What basis is there for the assumption that these missing links have been found, that the genealogy of man has been traced?

The unanimous opinion of evolutionistic science is that none of the remains found in so-called Tertiary deposits, in the Pliocene, or even in the Pleistocene strata of the Quarternary age, supply the missing link in the evolution of man from the brute. These fossil remains are either plainly related to the brute, as when the bony process in the lower jaw, which is necessary for the growth of a human tongue, is missing, or they are quite evidently the remains of men that differed in no essential from recent man, *Homo sapiens*. *The link that connects the two has not been found.* This is the verdict of science.

Dr. Beek says in *Der Naturmensch*, Vol. III, p. 53: "The presence of man in the Tertiary period is not sustained by the facts." Alfred Russell Wallace, cooriginator with Darwin of the "Darwinian theory," quotes Huxley as follows in his book *Darwinism*:⁹⁾ "In conclusion I may say that the fossil remains of man hitherto discovered do not seem to me to take us appreciably nearer to that lower pithecoïd form, by the modifications of which he has probably become what he is." "Certain California remains of Pliocene man," Wallace continues, "give no indication of a specially low form of man; and it remains an unsolved problem why no traces of the long line of man's ancestors, back to the remote period when he first branched off from the pithecoïd type, have yet been discovered." On another page Wallace again expresses his wonderment at the fact that there is a "complete absence of human or prehuman remains in all those deposits which have furnished in such rich abundance the remains of other land-animals." (*Darwinism*, p. 309.) Wallace refers to the Pliocene period, the same age of which Mr. Roosevelt so confidently asserts that during this time "developed the primates, from which came the monkeys, the anthropoid apes, and finally the half-human predecessors of man himself." Where is the proof? The statement is unsupported by a shred of tangible evidence. Speaking of the oldest skulls, Wallace says: "What is still more extraordinary, the few remains yet known of prehistoric man do not indicate any

9) 1889, p. 307.

material diminution in the size of the brain-case." 10) The latest finds substantiate this opinion. Mr. Roosevelt makes no reference to the human skeleton found in the African Pleistocene, the Oldoway Man. This remarkable fossil was found in the Oldoway gulch in northern German East Africa, in 1913, by an expedition of the Geological Institute of the University of Berlin. The remains consist of a complete skeleton, which was found deeply imbedded in firm tufa. Unquestionably ancient as these remains are,—the bones are completely fossilized,—they have contained lamentably "few primitive characteristics" and hence have not been exploited in the interest of the evolutionary theory. A fragment of skull, a tooth, a thigh-bone, offer much more inviting fields to the evolutionist, since they permit his imagination to range without the restraint of fact. The Oldoway fossil, which is in every essential respect a normal human skeleton, possesses no special attractions for those who would represent man as a descendant of brutish ancestors.

Says Professor Virchow: 11) "We seek in vain for the missing link. There exists a definite barrier separating man from the animal which has not yet been effaced—*heredity*, which transmits to children the faculties of the parents. We have never seen a monkey bring a man into the world nor a man produce a monkey. All men having a Simian appearance are simply pathological variants. It was generally believed a few years ago that there existed a few human races which still remained in the primitive inferior condition of their organization. But all these races have been objects of minute investigation, and we know that they have an organization like ours, often, indeed, superior to that of the supposed higher races. Thus the Eskimo head and the head of the Tierra del Fuegians belong to the perfected types." "All the researches undertaken with the aim of finding continuity in progressive development have been without result. There exists no proanthrope, no man-monkey, and the 'connecting link' remains a phantom." Dr. Berndt, of Berlin, says in a recent contribution to a scientific journal: "Since Dr. Dubois's *Pithecanthropus Erectus*, once so far famed, must without question now be excluded from the direct genealogy of man, at least of European man, we must admit that there is *no link* which really bridges the chasm between the manlike animals (as, *e. g.*, the living chimpanzee and the fossil *Pliopithecus*, the *Dryopithecus*, and others) and even the most primitive men (as, *e. g.*, the Australian of

10) This, as has been shown by the cubic measurements quoted above, applies even to the Javan specimen of Dr. Dubois.

11) Quoted by Fairhurst, *Organic Evolution Considered*; Standard Press, 1913.

to-day or the prognathous of the Ice age, the Neanderthal or Heidelberg Man)." 12) It had been suggested by some that in the *Dryopithecus Darwini*, referred to by Dr. Berndt, a fossil ancestor of man had been found. However, also this hope of the evolutionists has been dashed. The *Encyclopedia Britannica* says: 13) "It has been suggested that it is clearly related to man, but this idea is discountenanced by the great relative length of the muzzle and the small space for the tongue." Thus every new find, upon investigation, proves the truth of Virchow's words: "We must really acknowledge that there is a complete absence of any fossil type of a lower stage in the development of man. Nay, if we gather together all the fossil men hitherto found and put them parallel with those of the present time, we can decidedly pronounce that there are among living men a much greater proportion of individuals who show a relatively inferior type than there are among the fossils known up to this time. . . . Every positive progress which we have made in the region of prehistoric anthropology has removed us farther from the demonstration of this theory." Not one of these loudly heralded missing links has stood the test of scientific investigation, but has either been recognized as undoubtedly Simian in character or has been ranged by competent anthropologists with some existing human type. There is so far not a scintilla of evidence for the evolution of man from the beast, of which Mr. Roosevelt so glibly speaks: "The evolution of man from a strong and cunning brute into a being having dominion," etc.

The Cro-Magnon Race.

According to the view adopted by Mr. Roosevelt, the Neanderthal race died out, and "these savages, lower than any existing type, were supplanted by the tall, finely built Cro-Magnon race of hunters, who . . . belonged to the same species of man that we do — *Homo sapiens*." He believes that an interval of at least 25,000 years separated the immigration of the Cro-Magnon race from the appearance of the Neanderthal race. Once more we ask, What are the ascertained facts which underlie these definite assertions?

So much is true that in certain caves in France the remains of an earlier race of inhabitants have been found, mixed with bones

12) *Naturwissenschaftliche Rundschau der Chemikerzeitung*, April, 1914. This very recent testimony is interesting also for its assigning of true human characteristics (with Huxley, Brinton, Wallace) to so-called Pleistocene remains, such as the Neanderthaler, whom Mr. Roosevelt classes with the half-beasts.

13) Vol. XXII, p. 336.

of land-animals now extinct. Also, on the walls of these caves and on stones and bones these cave-dwellers engraved with no mean skill outline drawings of bison, reindeer, mammoth, horses, and the like. Beyond these unquestioned facts we again move in a maze of contradictory opinion, of which the *National Geographic* article once more contains no hint. According to the article on Caves in the *Encyclopedia Britannica* the skeletons found in these French caves are not the remains of the artists whose work was found in the same chambers; yet, according to Mr. Roosevelt's article, just this is the case. It was at one time supposed that these cave-men had well-developed animal characteristics. This idea is now given up, and instead of assigning to them an age of 100,000 years, as did Schmerling and many others, most anthropologists are satisfied with a period of 12,000 to 15,000 years, though some remains found in French caves were by Spring and Buckland regarded as no more than 4,000 years old. Indeed, drawings of human features have recently been found in the cave of La Colombiere, which in no wise resemble the traditional cave-man physiognomy. They are described as follows: "The head is large, the forehead round and prominent, rising slightly obliquely. The face is long and is distinctly projected forward; the chin is prominent, the nose long and very thick." When the drawings of animals made by these cave-dwellers are pronounced intensely realistic by all who have seen them, are we not permitted to conclude that the features of human beings portrayed in these caverns come close to the general appearance of men in that remote age? Yet the features described by Messrs. Mayet and Pissot (1913) can be duplicated a thousand times on a walk down Broadway. There is not a trace of the animal in the drawings which they show in facsimile.

Mr. Roosevelt refers especially to the Cro-Magnon Man and supplies an illustration showing him in his cave in the act of drawing a bison on the wall. The Cro-Magnon Man is described in the article as a race of hunters, "who in intelligence evidently ranked high." Yet competent investigators have held that the Neanderthal Man and the Heidelberg Man, which Mr. Roosevelt classes with the brute-links in the descent of man, were of the same race as the French cave-dwellers. In his lectures on "Nature and the Bible" Dr. J. W. Dawson, the well-known geologist and principal of McGill University, classes the Cro-Magnon, the Engis, and the Neanderthal skulls as "Palcocosmic skulls." Of the Cro-Magnon cave remains he says: "The brain-case is very long, more so than in ordinary modern skulls, and this length is accompanied with a great breadth, so that the brain was of greater size than in average modern man; and the frontal region was large and well developed. In this respect this

most ancient skull fails utterly to vindicate the expectations of those who would regard prehistoric men as approaching the apes. . . . The celebrated Engis skull, believed to have belonged to a contemporary of the mammoth, is also *precisely of the same type*, though less massive than that of Cro-Magnon; and lastly, even the somewhat degraded Neanderthal skull, though inferior in frontal development, is referable to the same long-headed style of man, in so far as can be judged from the portion that remains. Let it be observed that these skulls are probably the oldest known in the world, and they are *all referable to one race of men.*"¹⁴⁾ This opinion of Dawson, who was an expert craniologist, surely outweighs that of an amateur, who merely sums up the theories of one group of scientists and passes them off on the public as "soundly determined" fact. Indeed, Quatrefages, the great French anthropologist, believes that the Cro-Magnon people were of the same stock as the large-limbed and shapely Kabyles (Berbers) of modern Mauritania! Virchow says: "The old troglodytes, pile-villagers, and bog-people prove to be quite respectable society. They have heads so large that many living people would be only too happy to possess them."¹⁵⁾ And Le Conte cites the French authority on cave-men, M. Lartet, concerning the skeletons found in the Aurignac cave to this effect: "This was formerly a family or tribal burial-place; in the cave, along with the bodies, were placed funeral gifts in the form of trinkets and food; the funeral feast was cooked and eaten on the level space in front of the cave; carnivorous beasts gnawed the bones left on the spot. It is evident that the Aurignac men *practised religious rites which indicated a belief in immortality.*"¹⁶⁾

Perhaps one of the most interesting and curious cases is that of the Talgai skull found in Australia some few years ago. It was

14) p. 171.

15) Quoted by Samuel Harris, *The Philosophical Basis of Theism*. Scribner's, 1892, p. 460. The following *Chicago Tribune* cable, dated Cape Town, South Africa, August 5, 1925, is apposite in more than one respect: "A modern native with a prehistoric head has been discovered in Africa. The discovery was made while working in a dissecting-room on the cadaver of a native who died a few weeks ago. The skull is exactly of the same type as that of the Boskop prehistoric man discovered in the Transvaal twelve years ago. The present skull has a brain capacity of 2,000 cubic centimeters, whereas the average European has a brain capacity of only 1,500. Previously the Boskop type has only been known in the fossil form. Professor Drennan, who made the find while measuring the brain capacity of different skulls, said: 'The present skull measures 212 millimeters, which is several millimeters longer than the longest skull known.'"

16) *Elements of Geology*, p. 596.

dug up in a billabong (a little stream flowing out of a river and ending in a pool). Undoubtedly it is the cranium of a person of small brain and presents other characters generally associated with a low level of civilization. It was claimed to be of great age and to represent an inhabitant of the country of great antiquity. In fact, we had the old ascription of a million years made use of in a lecture on the subject. Others, more conservative, put its age down as 50,000 years. Then there appears upon the scene one Mr. Archibald Meston, who for years held the position of "Protector of the Aborigines" in Queensland, who says that "it is a somewhat sorrowful duty to remove the Talgai skull from the realms of romance," but that to his knowledge a black fellow was shot by the native police and buried in that billabong, the grave being filled with red basaltic clay of the kind in which the supposed ancient skull was found. That, one would have thought, was an end of the Talgai skull. But Prof. Elliot Smith, brother to the gentleman who is the sponsor for this skull, in his recent work on the *Evolution of Man*, still stands by it and speaks of it as of great antiquity and fossilized. That makes the whole thing very mysterious and at least causes one to feel that caution should be exercised where it is so doubtful as to what the period of this object may be.

Man and the Primates.

It is evident that in answering the question, "How old is man?" Mr. Roosevelt has taken counsel with a naturalist who has adopted the most extreme opinions of modern scientists, and that he has represented much controverted subjects as if they were the assured results of science. It should be said, however, that in one point Mr. Roosevelt is in agreement with the consensus of modern theorists on the antiquity of man: all hold that man is the product of an evolution extending over eons of prehistoric time. We cannot leave this subject without briefly investigating the grounds upon which this general assumption rests.

Mr. Roosevelt says: The mammals "developed along many different lines, including that of the primates, from which came the monkeys and anthropoid apes and finally the half-human predecessors of man himself." (p. 112.) Here again the distinguished writer adds to a doctrine generally held by scientists certain features which by no means reflect orthodox university belief of to-day. Let us concede that biologists are now nearly unanimous in the conclusion that there has been some kind of evolution; yet they are very doubtful as to its *rationale*, its causes, and the probable lines of phylogeny, or the "tree of life." No reputable scientist, be he geologist, paleontologist, anthropologist, or biologist, would state the

matter as Mr. Roosevelt states it, that "*from the primates came the monkeys, the anthropoid apes, and finally the half-human predecessors of man himself.*" True, Haeckel's *Natural History of Creation* contains a complete and circumstantial history of human ancestry in twenty-two stages of existence, from the unicellular Monera up to perfect Man. But Du Bois-Reymond, many years ago, declared Haeckel's genealogical tree (*Stammbaum*) to be "as authentic in the eyes of the trained naturalist as are the pedigrees of Homer's heroes in those of an historian." Thereby Du Bois-Reymond incurred the bitter and unappeasable wrath of Haeckel; yet there is no scientist to-day who does not, with Du Bois-Reymond, as against Haeckel, reject the notion that animal forms as they are to-day can actually be traced through fossil ancestors to the original, simple cell.

We may go a step farther. The best authorities are no longer unanimous in classifying man biologically with the order of Primates.¹⁷ Science gives increasing weight to the opinion that man is not a member of the same order of creatures as the monkey and the ape. *Homo sapiens* is being differentiated from the order of Primates, even as the bat, which Linné classified as a Primate,

17) Mr. Roosevelt seems to distinguish the anthropoid apes, the monkeys, and man from the Primates. He refers to "the Primates, *from which came the monkeys,*" etc. Now, "Primates" has in biological language always included monkeys, apes (*i. e.*, tailless monkeys), and man. Huxley divided the Primates into seven families, among them man being the first. Max Weber originated the classification: Anthropoid Primates, with sub-orders Simiæ (species: Man, apes, baboons, monkeys), and Prosimiæ (lemurs). Professor Dorn, of Fort Wayne, informed us that neither Brehm's *Tierleben* nor the *Cambridge Natural History*, the greatest works on zoology in German and English, respectively, draw a distinction such as Mr. Roosevelt appears to draw, between Primates and the order which includes man and the apes, but use "Primate" as a class name for Leuroidea and Anthropoidea (monkeys, apes, man). Mr. Roosevelt's employment of the term "Primates" is so very unusual that we took occasion to make inquiry by letter. Under date of May 8, Mr. Roosevelt replied as follows:—

"MY DEAR SIR:—

"That sentence seems to me to be clear. At any rate, what I meant was that one of the original mammalian lines was that of the Primates, which originally consisted of low lemuroid forms. From the original stem the monkeys broke off at some date when the anthropoid apes and the predecessors of man were still part of the same stem. Then this second stem divided, the anthropoid apes splitting from the branch which led to the half-human predecessors of man. In other words, I regard these half-human predecessors of man not as descendants from the anthropoid apes,

wms differentiated long ago. The differences which have greatly impressed all who have given the matter special consideration are (aside from the intellectual superiority of man) the peculiarities of the human walk and his unique dentition. Professor Dana, the greatest paleontologist our country has produced, says in the final edition of his *Manual of Geology*, p.1017: "Man stands in the successional line of the Quadrumana, at the head of the Animal Kingdom. But he is not a Primate among Primates. The Quadrumana (apes) are Brute Mammals, as is manifested in their Carnivore-like canines and their powerful jaws; in their powerful muscular development; in their walking on all fours; and the adaptation thereto exhibited in the vertebrae, producing the convexity of the back; and also in other parts of the skeleton. Man, on the contrary, is not Quadrumanous.¹⁸⁾ His limbs are of the primitive type so common in the Eocene. He is plantigrade," has neither hoofs nor claws to his five toes, but something between the two. "Moreover, in his teeth Man is thoroughly primitive, he having in fact the

but both as descended from remote ancestors, who had split off from the monkeys; all, of course, tracing back to the early Primates. Of course, the order of Primates includes all of them alike. If you turn to Professor Osborn's book, you will see the matter gone over in some detail.

"Sincerely yours,

"THEODORE ROOSEVELT."

This statement clears up the reference to Primates earlier than man and the monkey; these Primates "originally consisted of low lemuroid forms." This was the opinion held fifteen years ago. But if anything has been definitely established since that time, it is the fact that the fossil remains once depended upon supply no evidence for this hypothesis. No direct line leading from man to extinct lemurs has been traced. See the opinions of Cope and Hubrecht hereafter quoted.

18) We have traveled a long way since Dr. Moscati taught that the upright walk of man is a cause of much inconvenience and disease, proving that he was misled by reason and imitation to deviate from the first animal arrangement. Thus, for example, if man had continued to walk on all fours, his intestines would not have come into their present "pendulous and half reversed condition," which is a cause of "deformities and numerous diseases." Again, "the heart, because it is compelled to hang free, elongates the blood-vessels to which it is attached, assumes an oblique position, since it is supported by the diaphragm, and slides with its end against the left side—a position wherein man differs from all other animals and thereby receives an inevitable inclination to aneurism, palpitation, asthma, chest-dropsy, etc., etc." Thus it is proved that man is really by nature intended to be, and originally undoubtedly was, quadrupedal! (Quoted in *Kant and Spenser*, by Dr. Paul Carus, p. 44.)

original quadrituberculate form of molar, with but little modification.' . . . All these low-grade characteristics and despecialized conditions of the structure evince that man does not pertain zoologically to the group called Primates, either to the higher or lower end of the series. The divergence from the *Quadrumanus* is manifestly great." These divergencies, says Dana, p. 1036, "*are admitted proof that he has not descended from any existing type of ape*. In addition, man's erect posture makes the gap a very broad one. The search for 'missing links' has been carried forward with deep interest during recent years. But although fossil skeletons have been found among remains of the Pleistocene mammals in Europe and America, none show any departure from the erect posture or have smaller brain cavity than occurs among existing races of men. . . . Since man's structural relations are, in several respects, closest with the precursors of the *Quadrumanus*," i. e., with fossil specimens which are, geologically, "earlier" than the monkeys and apes, "his derivation from any known type of man-ape has been pronounced impossible." The reader will observe that this opinion of the dean of American paleontologists flatly contradicts the primate or ape ancestorship which Mr. Roosevelt with such *insouciance* summarizes in the introduction to his paper.

Agassiz says, simply: "Man does not descend from the mammals which preceded him in the Tertiary age." Nor is this merely the view of an old-school geologist, but it is the regnant opinion among scientists to-day. The structural differences between man and the modern ape are held to be absolutely insuperable. All "other" Primates have a tendency to elongation of the canine teeth. All apes support themselves on the sides of the feet and the bent knuckles of the hand.¹⁹⁾ They are, as Dana says, not plantigrade. Geologically speaking, the characteristics of man's teeth and of his walk are "more ancient," less "developed," than the dentition and walk of the Primates. In addition, Mr. Tylor is constrained to say, in the *Encyclopedia Britannica* (II, 110): "The differences between a gorilla's skull and man's are truly immense." He quotes Huxley: "On psychological grounds, Huxley acknowledged an immeasurable and practically infinite divergence, ending in the present enormous psychological gulf between ape and man."

Thus, aside from the great disparity between the intellect of man and of the ape, the laws of development which are generally applied in establishing degrees of relationship in the plan (or "tree") of life have been seen to militate against ranging man with any existing animal, and the idea that man has living ancestors among

19) *Encycl. Brit.*, II, 109.

the apes and monkeys is definitely given up. And this is truly an amazing fact. Far from establishing a close relationship between man and the ape, scientific research has established the fact that there is not only among existing species, *but even in the fossil remains not a single specimen which can properly be called a link in the chain of man's descent.*²⁰⁾ So far as man is concerned, the development of which Mr. Roosevelt speaks, from "small warm-blooded beasts to the Primates," etc., is mere hypothesis. There is not only *one* missing link (*viz.*, the one between ape and man), but the entire genealogy of man is made up of missing links, in other words, is speculation pure and simple.

Reputable scientists, who should be carefully distinguished from irresponsible amateurs, who have no ballast of *information* to keep them on an even keel, make no secret of this disheartening fact. Dr. Berndt, in the article from which we have already quoted, says: "Trees of life, apparently built for all ages, have fallen or have become mere *shrubs* of life (*Stammbuesche*), covered with a tangle of scientific doubt." "We are farther than ever removed from the answer to the question, Whence the vertebrates?" Animals once confidently termed "primitive" are now recognized as high in the scale of development. "And Max Weber, one of the best authorities on mammals, regards the anthropoid apes of to-day as a branch parallel to the human branch. Scholars like Cope, Adloeff, Klaatsch, prefer to push the origin of man back to the earliest Eocene, whence he *went his way from the very outset separate from the apes.*" This is a highly significant utterance. It means nothing more than this: there is not one recognizable link which unites man with the animal kingdom. All the intermediate forms between man and the original jelly-fish, which according to Haeckel and Vogt was his ancestor, have disappeared. For their existence we have nothing but the word of a rapidly diminishing number of scientists.

Positive denial of the Darwinian theory of human descent was made in 1923 by no less an authority than Prof. Arthur Couziere, famous author of numerous biological and medical works. Addressing the Academy of Medicine at Paris, Professor Couziere declared that the ape was created after man and that "the human being and the ape have always been types apart."

The latest conception which has been advanced by evolutionists is that of Multiple Origin. By this is meant that the same species have originated independently at various places on the earth's surface. It is held, for instance, that the animals of South America have had an evolution independent from the same animals on other

20) See quotations from Wallace, above; also Virchow.

continents. It is believed, too, that the natives of the Amazon country were evolved from the brute right on the spot and did not immigrate from elsewhere. Mr. W. H. Ballou, defending Multiple Origin, invites attention to the fact that the natives of Brazil are the most expert of all the swimmers and can remain long under water. He continues: "Associated with them are other land mammals. . . . Inference is that men and other mammals, including monkeys, arose in the Amazon country from varied types of amphibia which preceede them." Now, the supporters of this Multiple Origin theory are very bitter against the Single Origin evolutionists. Listen to Mr. Ballou: "American proponents to the single (Asiatic) origin theory *have been cowed and led by the nose* [the italics are my own] for years by a group of *bureaucrats* intrenched in Washington. These bureaucrats, now all *discredited*, have attacked every scientist who described their American human fossil or skeleton finds as prehistoric. They languidly pawed over such bones and learnedly dubbed them 'modern Indian.'" He adds that the Multiple Origin evolutionists have "effectually crushed these bureaucrats, leaving them *discredited and ridiculed, turning into trash* some costly monographs and volumes, *paid for by taxation of the American people and the funds of misguided philanthropists.*"

The truth is that the tree of life looks less and less like a tree, the farther research traces out in fossil remains the actual history of life. About 1890 Mr. Topinard still told us that the common origin of man and the anthropoid apes is to be found in an animal of the type of the Old World monkeys, while all monkeys, in turn, find a common root in a type like that of the lemurs. It became somewhat different when Professor Cope suggested that advancing knowledge led to the belief that the Anthropomorpha (*i. e.*, man and the anthropoid apes) are not derived from the monkeys, but the two branches run back *independently* to find their first connection in the lemurs, the common ancestor of both; not, however, he added, in any existing type of lemur, but in extinct types of the Eocene period, that is to say, of the oldest geological period in which traces of animal life appear. This, again, is simply saying that there is no paleontological evidence for a tree of life with connecting links between man and the brutes.

The truly amazing fact that the various forms of life appear not more, but less related, the farther the evidence is being looked into, is admitted in every up-to-date text-book of paleontology or geology. Dana says in his great work, in a discussion of the development of life on the globe: "The lines of succession seldom connect the grander divisions of classes or tribes. . . . Instead of

lines from Amphibians to Reptiles and thence to Birds or to Mammals, all three groups, Reptiles, Birds, and Mammals, were probably derived directly from the Amphibians." (*Manual of Geology*, p. 1031.) Hence anthropologists were for decades much divided on the question whether the different races of men have had a common or a separate origin. Dr. S. G. Morton thought he could point out twenty-two centers in which the human race originated. The majority now believe that man originated in some *one* locality, and from a single pair. The origin of this pair, however, is shrouded in Cimmerian night. Only so much is pretty well agreed that no animal now living supplied the species from which modern man has "developed." As we have noted, a feeble attempt has been made to trace man through a side-line of the Primates, through the monkeys called lemurs, *Lemuridae*. These are a species of woolly-haired monkeys, about the size of a cat, with long, bushy tails and foxlike faces. They do not distantly resemble a human being, but have several structural similarities in common with man. An Eocene fossil has been found, the earliest known four-handed creature, called *Anaptomorphus homunculus*. The Neo-Lamarckian E. D. Cope traced the pedigree of man through the anthropoid apes to this minute animal, which he regarded as a lemur. (An illustration in Dana's *Manual*, p. 906, shows the skull of this creature to have been *one inch* in diameter.) But this identification is now pretty well relinquished by the evolutionists. Only five years ago Prof. A. A. W. Hubrecht, of Utrecht University, "conclusively" showed that *Anaptomorphus* belongs not to the lemurs, but to a line of its own approaching the anthropoid apes and sharply separated from the lemurs.²¹⁾ This again signifies that whilst the Eocene *Anaptomorphus*, to quote Mr. Cope, "strongly suggests a line of descent leading to man, the gap is much wider than men used to regard it, and the intermediate links are still missing." Such retrogression in the claims of "assured results" should make all amateurs careful. All dogmatic assertion —

21) *The Descent of the Primates*. Scribner's, 1897. Professor Hubrecht suggests that it may not be unwise to assume as the ancestor of man and the anthropoids an early Eocene Primate, differing from the apes, whose descent must be traced back, *independently of the ancestors of the modern apes*, to the amphibian father of all. It has been pertinently said that this "tree of life" "will soon begin to look amazingly like a plantation of eanes, each growing independently from a common soil" (*The Presbyterian and Reformed Review*, 1898, p. 782), in other words, will resemble very closely the tree of life suggested by Genesis, chapter 1. Professor Hubrecht says: "The genera known to us very rarely converge toward known predecessors as we go backward in geological time," *i. e.*,

and in this Mr. Roosevelt's article abounds — is out of place where the leaders in scientific research are admittedly at sea. The caution uttered by Charles Darwin in his *Origin of Species* is still in place; he says that in our present state of knowledge it seems to him "about as rash to dogmatize on the succession of organic forms throughout the world as it would be for a naturalist to land for five minutes on some barren point in Australia and then to discuss the number and range of its productions."

Anthropological research has produced no FACTS that are at variance with Genesis, chapter one. Concerning the Neanderthaler, the Cro-Magnon Man, etc., Dr. Dawson has said: "Geological evidence resolves itself into a calculation of the rate of erosion of river valleys, of deposition of gravel and cave-earths, and of formation of stalagmite crusts, all of which are so variable and uncertain that, though it may be said that an impression of great antiquity beyond the time of received history has been left on the minds of geologists, no absolute antiquity has been proved; and while some, on such evidence, would stretch the antiquity of man to even half a million years, the oldest of these remains may, after all, not exceed our traditional six thousand."²²) "These skeletons . . . tell us that primitive man had the same high cerebral organization which he possesses now, and we may infer the same high intellectual and moral nature, fitting him for communication with God and leadership over the lower world."²³) Similarly Figuier held that "we know of no archeological find [stone hatchets, etc.] that could not be pronounced only five thousand years old as well as fifty thousand." This would bring back the Age of Man to the limits given to human history by that object of scientific derision, the Ussher dates, in the margin of the Authorized Version.

there is no evidence of development according to the lines of the evolutionary theory; "their respective genealogies run much more parallel to each other, the point of meeting being thus continually transported backward toward yet older geological strata." (*The Descent of the Primates*, pp. 39. 40.) Viewing this endeavor of the evolutionists to lay down new hypothetical lines of descent here, there, and everywhere, rather than to ask seriously whether any such really exist in nature, one is tempted to suspect that, if writers of this kind did not put "evolution" into their premises, they would hardly find it in their conclusions.

²²) *Nature and the Bible*, p. 160.

²³) *Ibid.*, p. 175.

10. Man and Monkey.

Rather, let us say, three monkeys. For according to an article entitled "Fresh Evidence of Our Apish Aucestry," appearing in a 1925 issue of *Current Opinion*, the human race is derived from three different monkeys, the Orang-utan, the Gorilla, and the Chimpanzee. Moreover, it is the simplest thing in the world to discover just which of these tailless monkeys or apes is your own particular ancestor. How, if you permit the somewhat indelicate question, do you hold your legs when you squat? If you scat yourself with your legs crossed level in front of you, you have a Mongol strain in your blood and your great-x-grandpa was an orang. Do you arrange your legs perpendicularly in front of you? Then trace your line to the gorilla, who squats in this position. Do you at the same time lean forward on your feet? Boy, pago Mr. Chimpanzee!

We are writing in a spirit of lovity ill becoming the discussion of a scientific question. But we beg to differ; the *Current Opinion* article is not science, but a caricature of science, a badly drawn cartoon of science. Yet three pages of the magazine are given to this bit of balderdash. Listen: "The American Indian sits like an Oriental and is therefore definitely grouped with the oranges." Again: "*When a group of children in their bathing-suits squat around in a sand castle on the beach, we can determine at a glance their remote ancestry.*" And the article which contains this unqualifiable rot begins and ends with a fling at "Fundamentalists"—by which believing Bible Christians are meant. "Dr. Crookshank's entire thesis will, of course, infuriate the Fundamentalists." Oh, no, my editor-friend, nothing of the kind! A little concentrated nonsense like this every three months will be sufficient to convert old Uncle Osborn himself to the belief that evolution is a hoax. Infuriate? We could wish for nothing better than to have that sentence about the bathing beach inscribed with inch-high letters on the footboard of the bed of every evolutionist, where it will strike his eyes as they open from slumber. He might in the course of time awaken from what Immanuel Kant called "dogmatic slumbers,"—the faith in theories which parade as verities. And under the sentence about the bathing-beach children we should like to inscribe the words HAVA SUPAI and draw next to these the rude picture of a dinosaur.

Hava Supai is the name of a canyon in Northern Arizona. Where it joins Lee Canyon, a scientific expedition has found pictures cut into the wall by the hand of some prehistoric artist. These pictures show a variety of animals, most of them extinct in America, elephants, ibex—and a *dinosaur*. Now, the discovery of this

drawing of a dinosaur is the greatest sensation in the history of anthropological science. For, if man lived in the ago assigned to the dinosaur, then he lived countless eons *before there ever was an ape or monkey*. This picture completely annihilates every theory which would derive man from an ape ancestor. But do scientists now begin to give some credit to the story of man's creation as recorded in Genesis? By no means. The conclusion which one of them, Samuel Hubbard, curator of an Oakland, Cal., museum, draws, is that man is not a descendant from, but *ancestor to, the ape!!* We quote from a Los Angeles dispatch of May 19 to the *Chicago Journal*:—

"The pictographs show a variety of animals—elephants, horses, mountain sheep, ibex. Also men hunting these are shown.

"But, most important of all, in Mr. Hubbard's estimation, is the picture upon one of the canyon walls of a dinosaur, standing and balancing itself upon its tail. It is a dinosaur sketched, as it were, upon its native heath.

"This picture of the dinosaur,' says Mr. Hubbard, 'was drawn by some prehistoric artist, some man who actually had seen a living dinosaur. There is no good reason to believe that this dinosaur was not contemporaneous with the elephants, the ibex, the horses, etc., whose likenesses, though crude, also were found upon these walls.

"But right here I am challenged. I am told the dinosaur disappeared from this earth 12,000,000 years before the advent of man. To this my rejoinder is: Would this prehistoric artist draw a sketch of an animal—and a live one at that—which had disappeared from the earth 12,000,000 years before he came? No, he would not. Rather, as inferred by the pictures of the animals generally upon the walls, he sketched those of which he had vivid recollection. And among such was the dinosaur.

"Therefore, if some prehistoric man drew a dinosaur standing, this probably means that *man goes back in geologic time to the Triassic period* when dinosaurs flourished."

Now, then:—

"This being the case, we then are face to face with this conclusion: The monkey, to use the word popular to cover the species, is descended from man, with the great apes a degenerate form of man. Of course, the scientific theory which we have accepted is that in the orderly processes of nature man was the last animal created. I now am convinced, mostly by this picture of the dinosaur, that the theory thus is not true, but that, instead, its reverse is true.

"This reversal of theory, in my estimation, also accounts for the fact that most prehistoric skulls as we encounter them have

practically the same brain capacity as has the present-day skull of man."

At this point I would suggest that all my readers uncover and bow their heads for one minute in reverence before the scientific mind.

No one is so blind as he who does not want to see.

That existing theories about the age of man and of his derivation in line of descent from the apes are demolished by the discovery of these pictographs, is clear from the following paragraph, which I quote in full, in spite of its length, from an article by Dr. Arthur Selwyn Brown in the *New York Herald-Tribune* of January 4, 1925:

"Man has had a vast ancestry. If we could clearly trace it to its source, we should probably find it in some active unicellular organism living in the Archean era. He became known to naturalists through his bone remains, his stone implements, and his pictorial drawings and ornaments. But he was then a well-developed, intelligent being, not very different from the modern man. He or his more immediate apelike ancestors must have gone through a long preparatory training and development before an animal so wonderfully intelligent arose that he was entitled to be called sapient.

"The geological record shows that gigantic animals like the dinosaurs arose in the Triassic era. These were followed in the Jurassic era by the development of birds and flying reptiles. Flowering plants appeared in the lower Mesozoic period. Then there was a wide development of reptilian life and its extinction in the latter part of the Mesozoic era. Great archaic mammals appeared in the Paleocene period, and the Eocene era witnessed the advent of many species of the higher mammals. This was the period in which the immediate ancestors of man made great progress in their evolution from a primitive condition to a high mammalian status. Anthropoid apes were well established in the Oligocene age, and the Miocene era saw the full flowering of mammalian life. Here the seeds were set for one of the greatest events in organic evolution and one of the most startling dramatic moments in history—the transformation of an apelike animal into man, which occurred in the Pliocene period. Just as this great event passed off, there were startling changes in the climatic conditions of the earth. A warm or mild climate was succeeded by a cold one, which ushered in the long and important period known as the Glacial epoch."*

This paragraph offers nothing new to students of evolution. Dr. Brown merely summarizes in popular form the generally accepted

* See geological divisions of time above, p. 55.

views regarding man's origin. According to it, millions of years are demanded for the interval between the age of the giant lizards and the age of man's animal ancestors. These millions of years are wiped out by the dinosaur pictograph in Hava Supai Canyon, as the millions in Confederate paper were wiped out when Lee surrendered. It is like withdrawing from a public accountant permission to use the multiplication table. He's out of a job. Man living in the age of dinosaurs leaves the teacher of evolution without a job.

In Oxford, Sir Arthur Keith, an expert in anatomy, lectured last January on a skull found in Rhodesia, South Africa. He believed this skull to be "the oldest in existence." Its owner must have lived "between 100,000 and 200,000 years ago." Everybody sat in mute admiration of speculative science. Now, this same Professor Keith some years ago said that the Galley Hill skull was



McCann: God — or Gorilla

Rhodesia Cave-Man.

The drawing to the right was made by a newspaper artist; it shows an apelike skull with a very low crown. The actual photograph shows that it is a very human skull with a considerable forehead. The drawing shows how evidence is manufactured by evolutionists.

250,000 years old, 50,000 years older than the skull from South Africa. But the Galley Hill skull was submitted to a jury of experts, who, after careful examination, reported that the thing was not a skull at all, but merely an oddly shaped bit of stone. And as for the Rhodesia skull, Prof. B. Windle has just affirmed that it is not even fossilized, and that "it was found in a cave into which it had probably fallen through a crack."

In a quarry near Rutherford College, in North Carolina, a large bone was found last year, which was inspected by scientists from various parts of the country, some of whom declared it to be the tooth of some prehistoric reptile, while others said that it was the knee-cap of a monster not less than 300,000 years old, "when the Mississippi Valley was an inland sea." Later the owner of the quarry

in question, Mr. A. T. Abernethy, of Burke County, N. C., announced that it was one of the joints from the backbone of a whale which had been washed ashore on the North Carolina coast in 1882. He recognized it by a split in the bone where his brother had sawed out a piece when he needed some bone to repair a part of his violin. Moreover, he had himself deposited the specimen in the quarry in order to test the ability of scientists to determine the age of bones taken from the earth!

It will be objected that even sound science may fail at times, and that such errors as just instanced need not affect our opinion of the age of man, as stated by scientists. However, the argument cannot be terminated by any such evasion. We hold that the doctrine of evolutionists regarding the origin of man is not only *not proved*, but that it is *disproved*, particularly through the dinosaur pictograph, which places man's existence as a *rational being* in a period in which even his more proximate "ancestors," the apes, had not yet been evolved. It would be a simple matter to quote anthropologists who have, even before the Hava Supai drawings were found, declared that more accurate anatomical research has raised unexpected difficulties for the theory which connects man with the prehistoric apes. Furthermore, it will not do to say that, after all, "all scientists are agreed on the general truth of the theory of evolution." We have heard this asserted so often, particularly during the turmoil raised by the Tennessee evolution case, that it is worth our time to investigate this claim.

That scientists, as a rule, are evolutionists can readily be granted. That they are agreed on a *single fact, mode, or process* involved in the theory of evolution must as strenuously be denied. We shall here set in parallel columns two statements about the general truth of evolution, one (to the left) by Dr. H. L. Fairchild, taken from his valedictory as president of the American Association for the Advancement of Science, the other from a recent address by Professor Bateson, president of the British Association of the same name:—

"The modern biologist goes a step farther (than Darwin) and is looking for the origin of variations and the mechanism of heredity, problems far beyond Darwin's times. But he stands on the foundation built by Darwin since the whole structure of modern philosophy rests on that foundation."

"We go to Darwin for his incomparable collection of facts. We would fain emulate his scholarship, his width and power of exposition, but to us *he speaks no more with philosophical authority.*"

It will be observed that these two men, of equal standing in the scientific world, differ on the fundamental question whether Darwin's idea is the foundation of modern philosophy, or whether his authority shall be denied. According to Fairchild, the idea of Natural Selection (for this is the essence of Darwinism) applies to all philosophy, hence also to the human stock. If he is right, then a stock-breeding establishment, the stud-farm, is the shining exemplar for human society, and it becomes a matter for a jury of middle-aged cranks of both sexes to decide whether a boy or a girl is to mate, and whom, and whether their offspring is fit to live (for the "survival of the fittest" is simply the "non-survival of the unfitted"). On the other hand, if Bateson is right, we are now, seventy years after Darwin, again without any voice that can speak with authority regarding the essence of what evolution is or was. We are again where one-third of us started, if Dr. Crookshank is right, with the chimpanzee "up a tree," when asked, What IS evolution?

11. Unsolved Mysteries of Every Day.

"If birds could talk, what stories we might hear! We might learn of a time, ever so long ago, when their grandfathers were not birds at all. Then they could not fly, for they had neither wings nor feathers. The grandfathers of our birds had four legs, a long tail, and jaws set with teeth. After a time, feathers grew upon their bodies, and their four legs became changed for flying. These were strange-looking creatures. There are none living like them now."

I have copied, in the above, a quotation from the *Home Primary Geography*, by Harold W. Fairbanks, Revised Edition, published by the Educational Publishing Company. The extract is from page 124. This is the doctrine our American children in the public school imbibe in their geography lesson.

Concerning the descent of man another schoolbook has this: "His [man's] structure indicates descent from ancestors of apelike habits, living in trees and on fruits." (*High School Geography*, by Charles R. Dryer, page 255; American Book Company.)

These statements are put forth with an assurance as definite as the statement that a straight line is the shortest distance between two points. Birds are descended from reptiles, man has once been a brute; 3 and 7 are 10,—take it or leave it.

It is quite sure that the authors of these text-books were absent when the grace of humility was bestowed upon the children of men. They are cock-sure of everything, these writers of school-texts.

I have on my shelf a book written for the little tots, entitled *What Every Child Should Know About Earth and Sky*, which on 244 pages sets forth how all things came into being by evolution.

All of these authors assume that they know something about events according to their reckoning a hundred million years past. It is a pertinent question to ask, What do they know about the present? And it is a remarkable thing to observe how modest true scientists become when we ask them the question, What do you really know? Most of them are ready to answer even regarding the commonest things: *Ignoramus*, which is Latin for the plain English, We don't know!

Thomas A. Edison, in the *American Magazine* for August, 1921, said: "We don't know one-millionth part of one per cent. about anything. We don't know what water is. We don't know what light is. We don't know what gravitation is. We don't know what enables us to keep on our feet to stand up. We don't know what electricity is. We don't know what heat is. We don't know anything about magnetism. We have a lot of hypotheses, but that is all."

Voltaire, the ablest of France's infidels, who is a patron saint of the evolutionists of to-day, was in his generation considered the wisest and wittiest man in Europe. Yet did he know anything? Hear him: "The more we have read, the more we have learned, and the more we have meditated, the better-conditioned we are to affirm that we know nothing."

Concerning the very elements of science, Prof. William Bateson said in *Science*, August, 1914: "Of the physics and chemistry of life we know next to nothing. Living things are found by a simple experiment to have powers undreamed of, and who knows what may be behind?" An address by Dr. Nicholas M. Butler, president of Columbia University, is quoted by the *Catalyst*, an organ of the American Chemical Society, as follows: "Theoretically the average scientific investigator will admit that many of his beliefs are merely hypotheses, but practically he will fight for them as though they were demonstrated facts. In view of the constantly shifting grounds of scientific data the men of science ought to be thankful for the comparative tolerance with which their dogmatizing is received."

Observe the extremely cautious statement of Professor Coulter, of Chicago University, the foremost botanist of America, regarding the present state of evolution: "Darwin carried the method of observation and inference to its limit; but inference is not demonstration. Evolution is a very intricate process, and the earlier explanations deal only with the more superficial phenomena. They are true as they go, but they do not get at the fundamentals."

Then he propounds as questions still open, the following: "What is the cause of variation? What is the nature of the variations that are important in evolution? How may variations be perpetuated and multiplied? How are the variations manipulated to effect progressive evolution?"

(The reader will understand that thirty years ago we were told that all these questions had been answered and that those who opposed evolution were simply fighting windmills.)

When I was a boy, science said the atom was the smallest possible division of matter; now "science" says the atom is a whole system of gyrating worlds. A few generations ago science said the sun revolved around the earth; then science denied that and said the sun is standing still and the earth does the revolving; now science says both statements are false, and both earth and sun are whizzing through space. A year or so ago science said that light is a form of motion; now science says that light is matter and subject to gravitation. Of course, a few old mossback professors have not come around to it yet, but Professor Einstein says it is so.

Which scientist has been able to explain why the Quebec bridge collapsed during construction — collapsed not once, but three times, although built absolutely in accord with the accepted theory of strains? How can they expect us to trust them when they say what has happened in the gas-ball stage of the universe if they are not sure of the laws which govern bridge-building?

True scholars have always been bumble, and the greatest of them have been Christians. It was Isaac Newton, one of the mightiest intellects of all time, who said that all he knew amounted to a few pebbles gathered on the shores of infinity. Pascal, the mathematical genius, Faraday, the physicist, Sir William Dawson, the Canadian scientist, Linné, the greatest botanist, — all had the humble spirit, the contrite heart, and the lowly mind. It is the two-cylinder, key-winder scientist, who writes high school texts for a living, that knows it all.

Some time ago I read the story of a little boy with a stick in his hand going to his father. The boy was puzzled. He had observed a fact for which he could give no account. He submitted the problem to his father, saying: "Papa, why is it that, when I take hold of one end of this stick and pull, the other end comes along?" The story made the father reply, "My son, I do not know." Some time after reading the story, I found in a philosophical religious journal an article by the father who was said to have made this confession to his son. In the article I came with delight upon an authentication of the story. The father there wrote: "No man

living knows why, when you take hold of one end of a stick and pull, the other end comes along." The writer of the article and the father of the story were the same man, Sir Oliver Lodge, past master in physics!

Well has a modern thinker said: "Developing science, i. e., objective knowledge, is encountering obstacles everywhere. Science studies phenomena; just as soon as it attempts to discover causes, it is confronted with the wall of the unknown and unknowable. . . . At the present time the situation is just this: the number of unknown facts in every region of scientific knowledge is rapidly increasing; and the unknown threatens to swallow the known—or the accepted as known. One might define the progress of science, especially latterly, as a very rapid growth of the regions of nescience [things we don't know].

"Nescience, of course, existed before, and not in less degrees than at present. But before it was not so clearly recognized—at that time science did not know what it did not know. Now it knows this more and more, and more and more knows its conditionality. A little more, and in every branch of science that which it does not know will become greater than that which it knows." (Ouspensky, in *Tertium Organum*, p. 233.)

In his *Introduction to Biology*, Arthur D. Darbishire is honest enough to say: "We are accustomed to express our faith in the fact of evolution; but no one pretends to know in detail how it has been brought about. These, then, are some of the unsolved problems in biology. And a biologist is successful if he proves one of these mysteries less of a mystery."

Gerald B. Winrod has said in a lecture: "Physically we live in a realm of mystery. To illustrate: Housewife, you baked bread yesterday. Where did you get the flour? From the grocer. Where did he get it? From the jobber. Where did the jobber get it? From the miller. Where did the miller get it? From the farmer. Where did he get it? From the soil. Where did the soil get the creative force that was communicated to the germ of wheat that produced the wheat-field? Mystery. Chemists made an egg; it looked like an egg, had a yolk like an egg, had a white like an egg, and tasted like an egg, but all the hens and incubators in the country could not hatch a chicken out of it, because it lacked life. Mystery. Water is composed of two elements, hydrogen and oxygen; but concerning the ultimate substance from which the two elements come forth chemistry can tell us nothing. Mystery. Suns and solar systems operate in obedience to fixed laws, but astronomy does not know from what source force comes. Mystery. We have learned that the

tinest atom of solid substance that enters into the anatomy of the planet is made up of about 1,740 electrons. What are atoms? Correlated electrons. What are electrons? Mystery."

Lord Kelvin, the English scientist, once said: "One word characterizes the most strenuous of the efforts for the advancement of science that I have made perseveringly for fifty-five years. That word is 'failure.' I know no more of electric and magnetic force or of the relation between ether, electricity, and ponderable matter, or of chemical affinity, than I knew and tried to teach my students of natural philosophy fifty years ago in my first season as professor."

Haeckel said: "We grant at once that the innermost character of nature is just as little understood by us as it was by Anaximander and Empedocles 2,400 years ago."

When Halley's comet in 1910 swung across our sky, a number of opinions held by scientists were proved wrong. A humble *Ignoramus* — "We don't know" — would again have been much more in place. The *Toledo Blade* said, much to the point: "Certain assertions about the nature of Halley's comet were accepted until last Friday as facts. It appears now they were theories. The scientists had been guessing; but their guessing carried such a fine air of plausibility that the world at large assumed they knew a few things about the comet beyond the danger of dispute."

Some every-day facts of plant life are a riddle to-day. Diligent study made by scientists to discover an explanation for the attraction of the root part of a germinating seed toward the earth, and the upward growth of the other part has been productive of no solution. An analysis of the chemical composition of both root and upward shoot shows them to be exactly alike, and yet, beginning at a point where they unite, they develop a distinctly opposite inclination, one being attracted by light and a tendency to grow upward, and the other inclined to grow downward into darkness. When, again, we contemplate the fact that of plants growing in the same soil, watered with the same water, and in appearance physically alike one will produce a brilliant scarlet flower, another, right next to it, will produce a perfectly white flower, without a trace of color, and another alongside produce a flower of clear blue, we wonder where the coloring comes from! It is, indeed, wonderful and mysterious. Also, we should note that growing in the same soil, watered with the same water, and all growing conditions alike, one plant will produce sweetness, another will be quite bitter, another sour, another quite peppery. No living scientist can explain these marvels and mysteries of nature.

A contributor to the *Kiwanis Magazine*, speaking of the ignorance of scientists regarding the ocean floor, illustrates his statement by supposing that an inhabitant of Mars approaches the earth to within five miles in a flying-machine and then begins to dip down to investigate the surface of the globe, as the oceanographer lets down sounding-lines to bring up bits of matter from the bottom. "The visitor from Mars cannot approach closer than five miles because he cannot live in air (just as the oceanographer cannot live in water). Our Martian lets down a sounding-line to the surface of the earth he cannot see. Repeated grapplings reward him with a dead cat, some pink silk underwear, a straw hat with a hole in it, a garden party's Chinese lantern, and a wheelbarrow.

"From this collection the Martian proceeds to reason what the inhabitants of the earth are like. Obviously, since he has one, he concludes that they are limp, furry creatures, very small when young. They must be large when grown, because the clothing is for a large animal. The climate is very mild, because the clothing is thin. The grown animals have horns on their heads, because the headgear has a hole in it. It is dark on the earth, because the large, furry, horned animals use lanterns. The civilization is slight, because the lantern is crude. There is little gravity on the earth, because a one-wheeled vehicle will travel over it. The earth is smooth, because the vehicle has no springs."

So little, says our Kiwanian, do we know about the millions of square miles of ocean bottom through efforts to bring up particles of matter by means of sounding-lines.

In spite of all this admitted ignorance concerning facts of our every-day life, evolutionary science continues to speak with the utmost assurance of events that are said to have taken place when this globe of ours was formed, endeavoring to force upon us as an ascertained fact that which any person of ordinary intelligence can at once perceive is a mere conjecture; a conclusion founded on arguments of which the premises have not been proved. For instance, no evidence has yet been produced of the occurrence in nature of the phenomenon upon which the whole theory is founded — namely, a favorable variation; that is to say, an instance of a favored individual possessing such an advantage in the struggle for life as to become the progenitor of a new species.

A great demand is made upon our faith by these skeptical philosophers when they ask us to believe that the wondrous universe, in its diversity of animal and vegetable life, sprang from a molecule of a congregation of atoms driven out by force; but it would be more easy to accept even such a doctrine if they could only give us

some reasonable hypothesis as to whence the primary germ, the wondrous atoms, or the marvelous slime originated, and how it happened that, independently of a Creator, any of these came to possess in themselves the power of developing a universe.

Men of science, of all persons, should seek to be free from bigotry and prejudice. Yet it is evident that when once entangled in the deadly meshes of skeptical pride, while "they profess themselves to be wise, they become fools," and in very truth "worship and serve the creature more than the Creator." As has been well said: "It is asking too much of inanimate material to make a system of worlds such that one star shall send heat and light upon an earth and make its soil send forth violets, grasses, trees, then animals, and finally man. It is asking too much of material things to have them arranging the deposits of dew at night, the showers of rain, and the ripening influence of the autumn months. It is asking too much of dust and ashes to expect them to make beautiful birds to fly in the air, beautiful gold and silver fish to live in the crystal brooks—too much to expect the power of dust to originate the idea of purple grapes and blushing peaches. We know that the material forces of nature can help along all these shapes of the wonderful; but if dead material can do such wonderful works, man should lament that he has a mind, for he has at the outset been wholly surpassed by elay that had neither life nor mind!"



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